73581

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Ganapathy Krishnan Examiner #: 79271 Date: 8/19/02
Art Unit: 1623 Phone Number 305-4837 Serial Number: 09/995691
Mail Box and Bldg/Room Location: 8D08 Results Format Preferred (circle): PAPER DISK E-MAIL
8B19

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Use of harpagid-related compounds for prevention and treatment of osteoporosis, arthritis, and ruptured disc and pharmaceutical composition containing the same.

Inventors (please provide full names): Joon Shin; Sang Kim; Yong Han

Earliest Priority Filing Date: _____

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

Please Search claims 1-4

Point of Contact:
Toby Port
Technical Info. Specialist
CM1 6A04
703-308-3534

****

STAFF USE ONLY	**Type of Search**	**Vendors and cost where applicable**
Searcher: _____	NA Sequence (#) _____	STN 297
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) 1	Questel/Orbit _____
Date Searcher Picked Up: 8/19	Bibliographic _____	Dr.Link _____
Date Completed: 8/22	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: 80	Other _____	Other (specify) _____

PTO-1590 (8-01)

=> file reg; d stat que l13
FILE 'REGISTRY' ENTERED AT 15:16:32 ON 22 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 21 AUG 2002 HIGHEST RN 444646-89-3
DICTIONARY FILE UPDATES: 21 AUG 2002 HIGHEST RN 444646-89-3

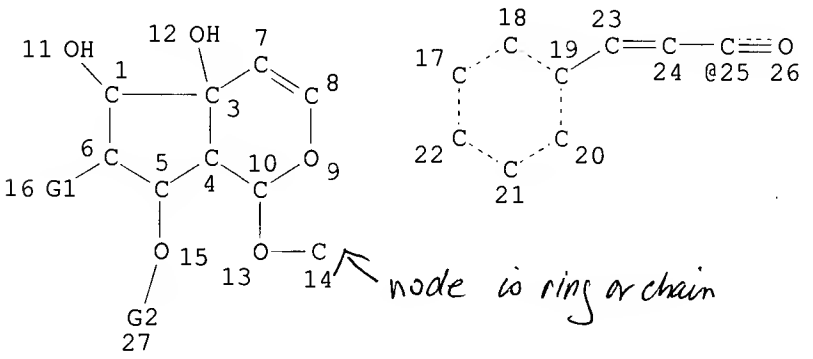
TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

L11 STR



VAR G1=H/28
VAR G2=H/25
NODE ATTRIBUTES:
NSPEC IS RC AT 14
CONNECT IS E1 RC AT 28
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE
L13 46 SEA FILE=REGISTRY SSS FUL L11

100.0% PROCESSED 1639 ITERATIONS 46 ANSWERS
SEARCH TIME: 00.00.01

=> file caplus; d que nos l20
FILE 'CAPLUS' ENTERED AT 15:16:42 ON 22 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 22 Aug 2002 VOL 137 ISS 8
FILE LAST UPDATED: 21 Aug 2002 (20020821/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
L11             STR
L13              46 SEA FILE=REGISTRY SSS FUL L11
L14             227 SEA FILE=CAPLUS ABB=ON  PLU=ON  L13
L15            7241 SEA FILE=CAPLUS ABB=ON  PLU=ON  OSTEOPOROSIS/CT
L16            1422 SEA FILE=CAPLUS ABB=ON  PLU=ON  OSTEOARTHRITIS/CT
L17           15001 SEA FILE=CAPLUS ABB=ON  PLU=ON  ARTHRITIS/CW
L18            3104 SEA FILE=CAPLUS ABB=ON  PLU=ON  ANTIRHEUMATIC AGENTS+OLD/CT
L19           17262 SEA FILE=CAPLUS ABB=ON  PLU=ON  ANTI-INFLAMMATORY AGENTS/CT
L20              10 SEA FILE=CAPLUS ABB=ON  PLU=ON  L14 AND (L15 OR L16 OR L17 OR
                    L18 OR L19)
```

```
=> file medline; d que nos l25
FILE 'MEDLINE' ENTERED AT 15:16:59 ON 22 AUG 2002

 FILE LAST UPDATED: 21 AUG 2002 (20020821/UP).  FILE COVERS 1958 TO DATE.

 On June 9, 2002, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2002 vocabulary.  Enter HELP THESAURUS for details.

 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.
```

```
L11             STR
L13              46 SEA FILE=REGISTRY SSS FUL L11
L21              16 SEA FILE=MEDLINE ABB=ON  PLU=ON  L13
L22           19607 SEA FILE=MEDLINE ABB=ON  PLU=ON  OSTEOPOROSIS+NT/CT
L23          117731 SEA FILE=MEDLINE ABB=ON  PLU=ON  ARTHRITIS+NT/CT
L24          329706 SEA FILE=MEDLINE ABB=ON  PLU=ON  ANTIRHEUMATIC AGENTS+NT/CT
L25               4 SEA FILE=MEDLINE ABB=ON  PLU=ON  L21 AND (L22 OR L23 OR L24)
```

```
=> file embase; d que nos l31
FILE 'EMBASE' ENTERED AT 15:17:19 ON 22 AUG 2002
COPYRIGHT (C) 2002 Elsevier Science B.V.  All rights reserved.

 FILE COVERS 1974 TO 15 Aug 2002 (20020815/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


L11             STR
L13              46 SEA FILE=REGISTRY SSS FUL L11
L26              68 SEA FILE=EMBASE ABB=ON  PLU=ON  L13
L27           23443 SEA FILE=EMBASE ABB=ON  PLU=ON  OSTEOPOROSIS+NT/CT
L28           93471 SEA FILE=EMBASE ABB=ON  PLU=ON  ARTHRITIS+NT/CT
L29            3212 SEA FILE=EMBASE ABB=ON  PLU=ON  ANTIRHEUMATIC AGENT/CT
L30           11750 SEA FILE=EMBASE ABB=ON  PLU=ON  ANTIINFLAMMATORY AGENT/CT
L31              13 SEA FILE=EMBASE ABB=ON  PLU=ON  L26 AND (L27 OR L28 OR L29 OR
                    L30)


=> dup rem l25 l20 l31
FILE 'MEDLINE' ENTERED AT 15:17:56 ON 22 AUG 2002

FILE 'CAPLUS' ENTERED AT 15:17:56 ON 22 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 15:17:56 ON 22 AUG 2002
COPYRIGHT (C) 2002 Elsevier Science B.V.  All rights reserved.
PROCESSING COMPLETED FOR L25
PROCESSING COMPLETED FOR L20
PROCESSING COMPLETED FOR L31
L33             26 DUP REM L25 L20 L31 (1 DUPLICATE REMOVED)
                ANSWERS '1-4' FROM FILE MEDLINE
                ANSWERS '5-14' FROM FILE CAPLUS
                ANSWERS '15-26' FROM FILE EMBASE

=> d ibib ab l33 1-4; d ibpb abs hitstr l33 5-14; d ibib ab l33 15-26

L33  ANSWER 1 OF 26     MEDLINE
ACCESSION NUMBER:    2001494528     MEDLINE
DOCUMENT NUMBER:     21221641   PubMed ID: 11324938
TITLE:               Reports of equivalence trials should not mask negative or
                     mediocre results.
AUTHOR:              Lequesne M; Samson M
SOURCE:              JOINT, BONE, SPINE, (2001 Mar) 68 (2) 183-5.
                     Journal code: 100938016. ISSN: 1297-319X.
PUB. COUNTRY:        France
DOCUMENT TYPE:       Letter
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         200109
ENTRY DATE:          Entered STN: 20010910
                     Last Updated on STN: 20010910
                     Entered Medline: 20010906

L33  ANSWER 2 OF 26     MEDLINE
```

ACCESSION NUMBER: 2001122331 MEDLINE
DOCUMENT NUMBER: 21017590 PubMed ID: 11143915
TITLE: Harpagophytum procumbens in the treatment of knee and hip osteoarthritis. Four-month results of a prospective, multicenter, double-blind trial versus diacerhein.
AUTHOR: Leblan D; Chantre P; Fournie B
CORPORATE SOURCE: Laboratoires Arkopharma, Carros, France.
SOURCE: JOINT, BONE, SPINE, (2000) 67 (5) 462-7.
Journal code: 100938016. ISSN: 1297-319X.
PUB. COUNTRY: France
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010222

AB OBJECTIVE: To evaluate the efficacy and safety of Harpagophytum in the treatment of hip and knee osteoarthritis comparatively with the slow-acting drug for osteoarthritis, diacerhein. PATIENTS AND METHODS: A multicenter, randomized, double-blind, parallel-group study was conducted in 122 patients with hip and/or knee osteoarthritis. Treatment duration was four months and the primary evaluation criterion was the pain score on a visual analog scale. Harpagophytum 2,610 mg per day was compared with diacerhein 100 mg per day. RESULTS: After four months, considerable improvements in osteoarthritis symptoms were seen in both groups, with no significant differences for pain, functional disability, or the Lequesne score. However, use of analgesic (acetaminophen-caffeine) and nonsteroidal anti-inflammatory (diclofenac) medications was significantly reduced in the Harpagophytum group, which also had a significantly lower rate of adverse events. CONCLUSION: In this study, Harpagophytum was at least as effective as a reference drug (diacerhein) in the treatment of knee or hip osteoarthritis and reduced the need for analgesic and nonsteroidal anti-inflammatory therapy.

L33 ANSWER 3 OF 26 MEDLINE
ACCESSION NUMBER: 2001152498 MEDLINE
DOCUMENT NUMBER: 21033374 PubMed ID: 11185727
TITLE: Efficacy and tolerance of Harpagophytum procumbens versus diacerhein in treatment of osteoarthritis.
AUTHOR: Chantre P; Cappelaere A; Leblan D; Guedon D; Vandermander J; Fournie B
CORPORATE SOURCE: Laboratoires Arkopharma, Carros, France.
SOURCE: PHYTOMEDICINE, (2000 Jun) 7 (3) 177-83.
Journal code: 9438794. ISSN: 0944-7113.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200103
ENTRY DATE: Entered STN: 20010404
Last Updated on STN: 20010404
Entered Medline: 20010322

AB In a double-blind, randomized, multicentre clinical study, the efficacy and tolerance of a herbal medicine product, Harpadol (6 capsules/day, each

containing 435 mg of powdered cryoground powder Harpagophytum procumbens), was compared with diacerhein 100 mg/day in the treatment, for 4 months, of 122 patients suffering from osteoarthritis of the knee and hip. Assessments of pain and functional disability were made on a 10 cm horizontal visual analogue scale; severity of osteoarthritis was evaluated by Lequesne's index. Spontaneous pain showed a significant improvement during the course of the study and there was no difference in the efficacy of the two treatments. Similarly, there was a progressive and significant reduction in the Lequesne functional index and no statistical difference was found between Harpadol and diacerhein. At completion of the study, patients taking Harpadol were using significantly less NSAIDs and antalgic drugs. The frequency of adverse events was significantly lower in the Harpadol group. The most frequent event reported was diarrhea, occurring in 8.1% and 26.7% of Harpadol and diacerhein patients respectively. The global tolerance assessment by patients at the end of treatment favoured Harpadol. The results of this study demonstrate that Harpadol is comparable in efficacy and superior in safety to diacerhein.

L33 ANSWER 4 OF 26 MEDLINE
ACCESSION NUMBER: 96305746 MEDLINE
DOCUMENT NUMBER: 96305746 PubMed ID: 8766229
TITLE: Antiinflammatory effects of different extracts and harpagoside isolated from Scrophularia frutescens L.
AUTHOR: Garcia D; Fernandez A; Saenz T; Ahumada C
CORPORATE SOURCE: Laboratorio de Farmacognosia y Farmacodinamia, Facultad de Farmacia, Sevilla, Spain.
SOURCE: FARMACO, (1996 Jun) 51 (6) 443-6.
Journal code: 8912641. ISSN: 0014-827X.
PUB. COUNTRY: Italy
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199610
ENTRY DATE: Entered STN: 19961106
Last Updated on STN: 19961106
Entered Medline: 19961021

AB Most species belonging to Scrophularia genus had been used as antiinflammatory drugs by the folk medicine. The phenylpropanoids are considered to be the active principles of these drugs with antiinflammatory action by different Authors, especially harpagoside and harpagide. In this report, the antiinflammatory effects of Scrophularia frutescens L. (Scrophulariaceae) was studied and the iridoid glucoside harpagoside has been evidenced and isolated for the first time from this plant. Aqueous extract, methanolic extract and harpagoside, isolated from the methanolic extract, were tested for antiinflammatory activity on the rat paw oedema. The results obtained showed that the aqueous extract has a small but significant antiinflammatory effect on carrageenan-induced oedema test, while methanolic extract has a lower antiinflammatory activity and the activity of the isolated harpagoside is remarkably low. Thus, the conclusion may be that S. frutescens L. is a potential antiiflammatory agent but its activity is not due to harpagoside.

L33 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
ACCESSION NUMBER: 2001:341413 CAPLUS
DOCUMENT NUMBER: 135:327100
TITLE: Inhibition of TNF-.alpha. synthesis in LPS-stimulated primary human monocytes by Harpagophytum extract SteiHap 69

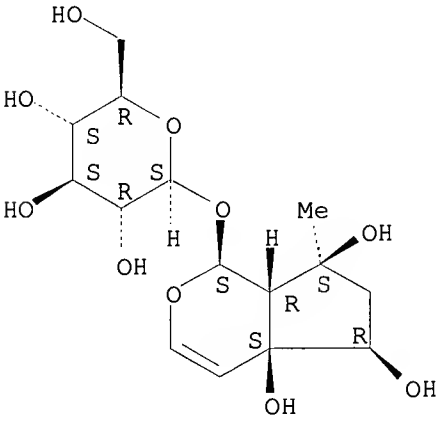
AUTHOR(S): Fiebich, B. L.; Heinrich, M.; Hiller, K.-O.; Kammerer, N.
CORPORATE SOURCE: Department of Psychiatry and Psychotherapy, University of Freiburg Medical School, Freiburg, Germany
SOURCE: Phytomedicine (2001), 8(1), 28-30
CODEN: PYTOEY; ISSN: 0944-7113
PUBLISHER: Urban & Fischer Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Harpagophytum procumbens (Devil's Claw) is often used in the supportive treatment of inflammatory and degenerative diseases of the skeletal system. Here we studied the anti-inflammatory properties of the Harpagophytum ext. SteiHap 69 (Steiner Harpagophytum procumbens ext. 69) on primary human monocytes, a useful model of peripheral inflammation. After eliminating lipopolysaccharides of bacterial origin, SteiHap 69 prevented the LPS-induced synthesis of tumor necrosis factor alpha (TNF.alpha.) in stimulated primary human monocytes in a dose-dependent manner. Harpagide and harpagoside had no effect on LPS-induced TNF.alpha.-release. Our data provides evidence that the Harpagophytum ext. SteiHap 69 has anti-inflammatory properties. Further studies are required to elucidate the mol. mechanism of Devil's claw anti-inflammatory effects.

IT **6926-08-5**, Harpagide **19210-12-9**, Harpagoside
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of TNF-.alpha. synthesis in LPS-stimulated primary human monocytes by Harpagophytum ext. SteiHap 69)

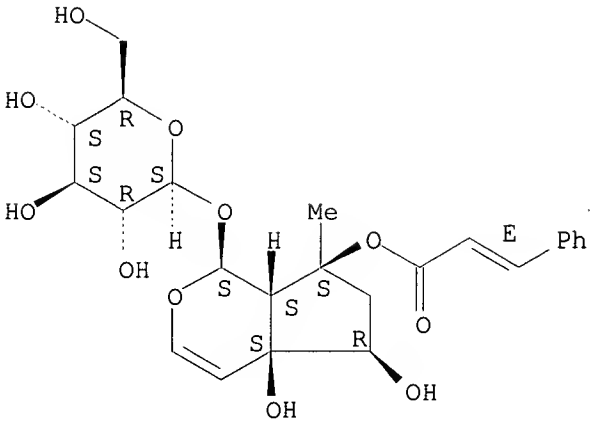
RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:591953 CAPLUS
TITLE: 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol and pharmaceutical formulations containing it
INVENTOR(S): Shin, Jun Shik; Kim, Sang Tae; Hahn, Yong Nam
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

same authors

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002220400	A2	20020809	JP 2001-365399	20011129

PRIORITY APPLN. INFO.: KR 2000-71438 A 20001129

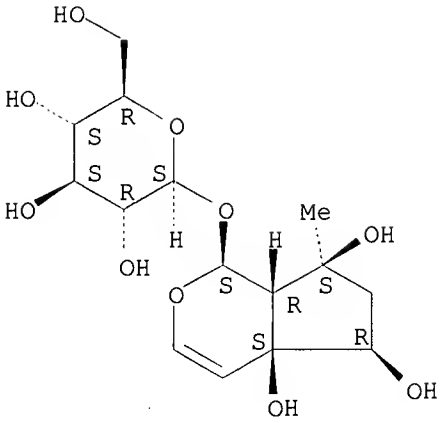
AB Pharmaceutical formulations for treatment of osteoporosis, arthritis, or intervertebral disk hernia, contain 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol (I) or its esters as active ingredients. I (420 mg) was purified from an EtOH ext. of 1848 g Cibotium barometz root powder. Administration of I at 75 .mu.g/mL p.o. for 2 wk prevented mouse paw edema induced by Zymosan A and Freund's adjuvant. Formulation examples of injections, tablets, capsules, and liqs. contg. I or I acetate are given.

IT INDEXING IN PROGRESS

IT **6926-08-5**, Harpagide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceuticals contg. octadecadienoyl(galactopyranosylgalactopyranosyl)glycerol for treatment of osteoporosis, arthritis, and intervertebral disk hernia)

RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

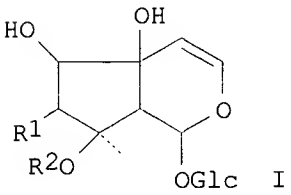
Absolute stereochemistry.



L33 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:533182 CAPLUS
DOCUMENT NUMBER: 137:88448
TITLE: Use of harpagide-related compounds for prevention and treatment of osteoporosis, arthritis, and intervertebral disk hernia, pharmaceutical compositions, and preparation of the compounds
INVENTOR(S): Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PATENT ASSIGNEE(S): S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201136	A2	20020716	JP 2001-365400	20011129

PRIORITY APPLN. INFO.: KR 2000-71497 A 20001129
GI



I

AB Harpagide-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of osteoporosis, arthritis, and/or intervertebral disk diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). Harpagide (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. harpagide or harpagoside are given.

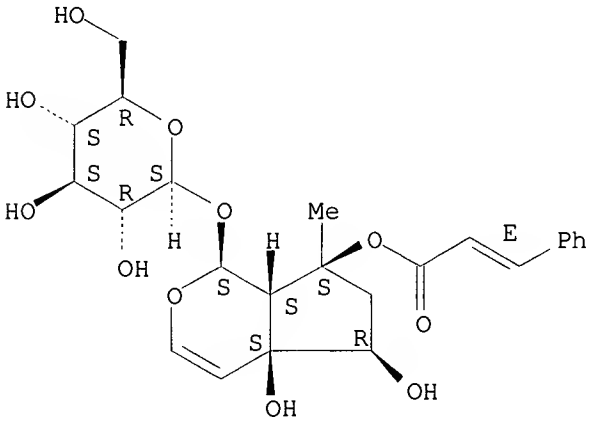
IT **19210-12-9P**, Harpagoside
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT

(Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(harpagide-related compds. for prevention and treatment of osteoporosis, arthritis, and intervertebral disk hernia)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

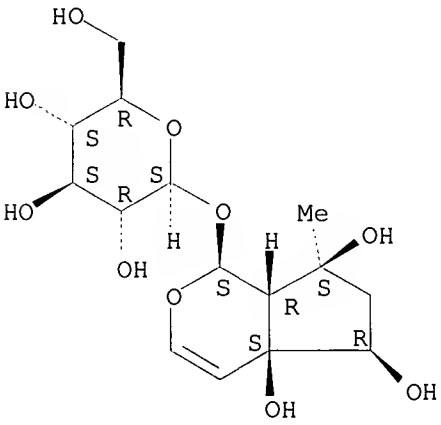


IT **6926-08-5P**, Harpagide
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(harpagide-related compds. for prevention and treatment of osteoporosis, arthritis, and intervertebral disk hernia)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L33 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:523037 CAPLUS

TITLE: Comparison of outcome measures during treatment with the proprietary Harpagophytum extract Doloteffin in patients with pain in the lower back, knee or hip

AUTHOR(S): Chrubasik, S.; Thanner, J.; Kunzel, O.; Conradt, C.; Black, A.; Pollak, S.

CORPORATE SOURCE: Department of Forensic Medicine, University of Freiburg, Freiburg, Germany

SOURCE: Phytomedicine (2002), 9(3), 181-194
CODEN: PYTOEY; ISSN: 0944-7113

PUBLISHER: Urban & Fischer Verlag GmbH & Co. KG

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Besides checking ests. of effectiveness and safety of using the proprietary Harpagophytum ext. Doloteffin, this postmarketing surveillance compared various disease-specific and generic measures of effect. We enrolled 250 patients suffering from nonspecific low back pain (Back group: n = 104) or osteoarthritic pain in the knee (Knee group: n = 85) or hip (Hip group: n = 61). They took an 8-wk course of Doloteffin at a dose providing 60 mg harpagoside per day. The measures of effect on pain and disability included the percentage changes from baseline of established instruments (Arhus low back pain index, WOMAC index, German version of the HAQ) and unvalidated measures (total pain index, three score index, the patient's global assessment of the effectiveness of treatment). Patients also received a diary for the daily recording of their pain and any addnl. treatments for it. The three groups differed in age, wt. and characteristics of initial pain. 227 patients completed the study. Multivariate anal. confirmed that several dimensions of effect were recorded by the several outcome measures but, in all groups, both the generic and disease-specific outcome measures improved by week 4 and further by 8. In multivariable anal., the improvement tended to be more when the initial pain and disability score was more: older patients tended to improve less than younger, the hip group tended to improve convincingly more than the back group, whereas the improvement in the knee group was less readily differentiated from that in the back group. The subgroup of Back patients who required NSAIDs during the 8 wk used significantly more per patient than patients in the other two groups, but that requirement also declined more with time. About 10% of the patients suffered from minor adverse events that could possibly have been attributable to Doloteffin. Between 50% and 70% of the patients benefitted from Doloteffin with few adverse effects. Thus, Doloteffin is well worth considering for osteoarthritic knee and hip pain and nonspecific low back pain.

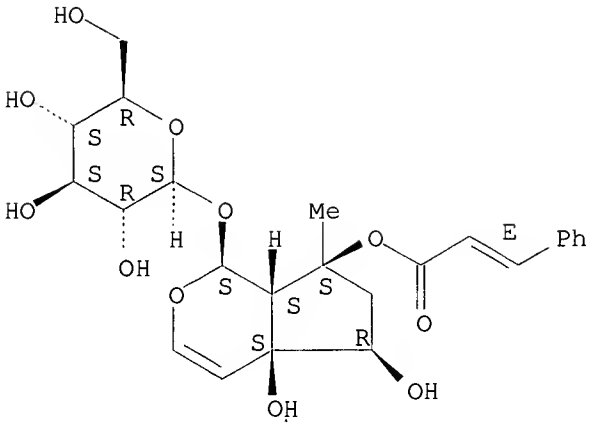
IT INDEXING IN PROGRESS

IT **19210-12-9**, Harpagoside
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparison of outcome measures during treatment with proprietary Harpagophytum ext. Doloteffin in patients with pain in lower back, knee or hip)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:31340 CAPLUS
DOCUMENT NUMBER: 134:95502
TITLE: Compositions and methods for treating or preventing osteoporosis
INVENTOR(S): Prince, Richard Lewis; Min, Xu
PATENT ASSIGNEE(S): University of Western Australia, Australia; Guangzhou University of Traditional Chinese Medicine
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001001996	A1	20010111	WO 2000-AU737	20000629

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

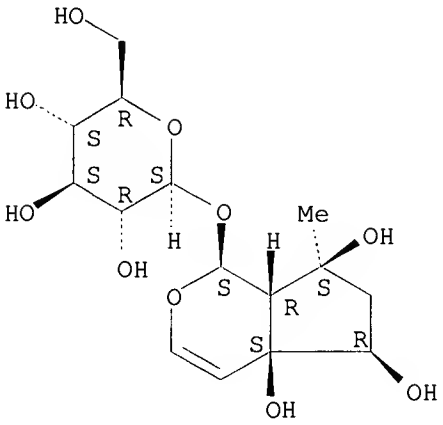
PRIORITY APPLN. INFO.: AU 1999-1273 A 19990629

AB The invention relates to a therapeutic compn. and method for treating osteoporosis and other calcium, and/or estrogen related disorders. Examples are given for treating osteoporosis with exts. of plants such as Epimedium koreanum, Slavia miltiorrhiza, Asragalus membranaceus, Pueraria thomsonii, and Psoralea coryliofolia.

IT **6926-08-5**, Harpagide
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(herb medicine exts. for treating or preventing osteoporosis)

RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:911084 CAPLUS
DOCUMENT NUMBER: 136:19391
TITLE: Health food supplement for osteoarthritis and arthritis
INVENTOR(S): Shimomura, Yasushi; Ozawa, Mitsuru
PATENT ASSIGNEE(S): I Ferm K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001346545	A2	20011218	JP 2000-172296	20000608

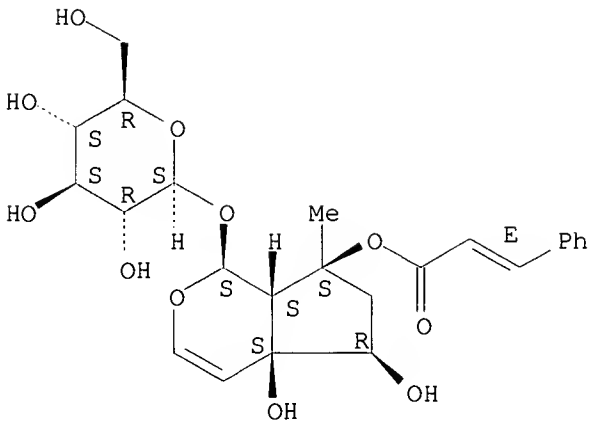
AB The health food is prepd. from glucosamine with the addn. of ext. of selected from Harpagophytum procumbens (raiongoron) contg. antiinflammatory harpagoside , Salix alba (white willow), and Zingiber officinale contg. analgestic gingerol. The health food supplement is useful for fast redn. of pain and inflammation.

IT **19210-12-9**, Harpagoside
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(health food supplement for osteoarthritis and arthritis)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



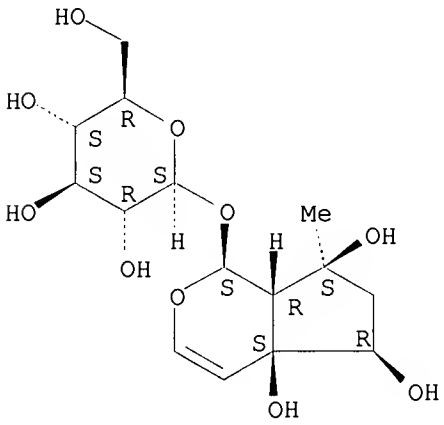
L33 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:379063 CAPLUS
DOCUMENT NUMBER: 133:114607
TITLE: Effects of some iridoids from plant origin on arachidonic acid metabolism in cellular systems
AUTHOR(S): Benito, Paulina Bermejo; Lanza, Ana Maria Diaz; Sen, Ana Maria Silvan; De Santos Galindez, Javier; Matellano, Lidia Fernandez; Gomez, Aurora Sanz; Martinez, Maria Jose Abad
CORPORATE SOURCE: Department of Pharmacology, Faculty of Pharmacy, University Complutense, Madrid, Spain
SOURCE: Planta Medica (2000), 66(4), 324-328
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Seven iridoid glycosides isolated from different exts. of Scrophularia scorodonia L., namely bartsioside, aucubin, harpagide, harpagoside, 8-acetylharpagide, scorodioside and scropolioside B, had been evaluated for their in vitro anti-inflammatory activity in cellular systems generating COX and LOX metabolites. Structure-activity relationships obtained from in vitro screening results were discussed. Most compds. assayed did not exhibit any significant effect on PGE2- and LTC4-release from calcium ionophore-stimulated mouse peritoneal macrophages. In the LTC4-assay, only aucubin showed a significant effect, with an IC50 value of 72 .mu.M. Harpagoside and harpagide also inhibited release of LTC4, but neither effect reached statistical significance. The release of PGE2 by mouse peritoneal macrophages stimulated with calcium ionophore was inhibited by harpagoside and 8-acetylharpagide, but this effect is not statistically significant. However, most iridoids assayed showed a significant effect on TXB2-release from calcium ionophore-stimulated human platelets, with inhibition percentages slightly lower than the ref. drug ibuprofen. Only harpagide, scorodioside and scropolioside B had no significant effect on TXB2-release. Our results indicate that selective inhibition of the TX-synthase enzyme may be the primary target of action of most of these iridoids, and one of the mechanisms through which they exert their anti-inflammatory effects.

IT **6926-08-5**, Harpagide **19210-12-9**, Harpagoside
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of iridoids from plant origin on arachidonic acid metab. in

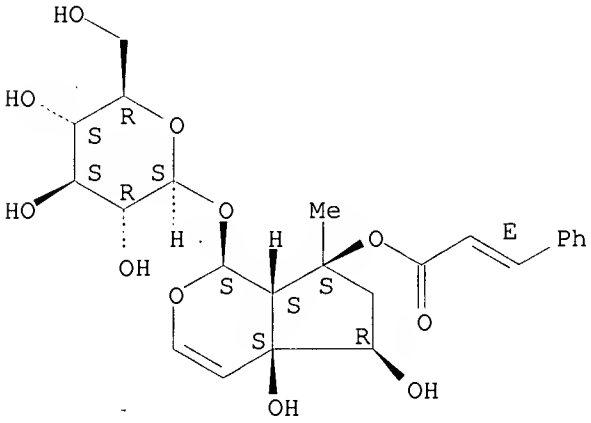
cellular systems)
RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:12975 CAPLUS
DOCUMENT NUMBER: 132:40502
TITLE: A method of producing high anti-inflammatory activity extracts from Harpagophytum procumbens
INVENTOR(S): Wheatley, Gary William; Chapman, Thomas Brian; Dring, Suzanne; Gericke, Nigel
PATENT ASSIGNEE(S): Essential Nutrition Limited, UK
SOURCE: Brit. UK Pat. Appl., 10 pp., 10 pp.

CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2335919	A1	19991006	GB 1998-6971	19980401

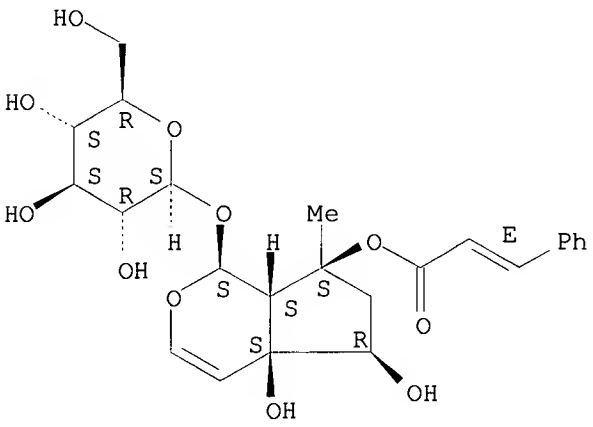
AB Extn. of the root of Harpagophytum procumbens with liq. carbon dioxide in the presence of cosolvent gives a much higher yield of harpagoside, an iridoid glycoside with anti-inflammatory properties, in the ext. in comparison to the known aq. or aq.-alc. extn. methods. An ext. contg. 10 % harpagoside (which corresponds to a yield of 1.5 % of starting Harpagophytum root material placed in the separator) was obtained when 10 % ethanol was used as cosolvent, in conjunction with supercrit. carbon dioxide (4000 psi/41.degree.). Tablets contg. this ext. were produced using a direct compression method. An enteric coating was then applied to the tablets by dissolving a coating soln. of cellulose acetate phthalate (10 %) in isopropanol/acetone in a heated rotary coating pan. The tablets thus obtained contain harpagophytum ext. equiv. to 1 g of whole herb.

IT **19210-12-9**, Harpagoside
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(liq. CO2/alc. for extn. of anti-inflammatory harpagoside from Harpagophytum procumbens)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L33 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:273779 CAPLUS
DOCUMENT NUMBER: 127:55965
TITLE: An analytical study, anti-inflammatory, and analgesic effects of Harpagophytum procumbens and H. zeyheri
AUTHOR(S): Baghdikian, B.; Lanhers, M. C.; Fleurentin, J.; Ollivier, E.; Maillard, C.; Balansard, G.; Mortier, F.
CORPORATE SOURCE: Laboratory Pharmacognosy, Faculty Pharmacy, Marseille,

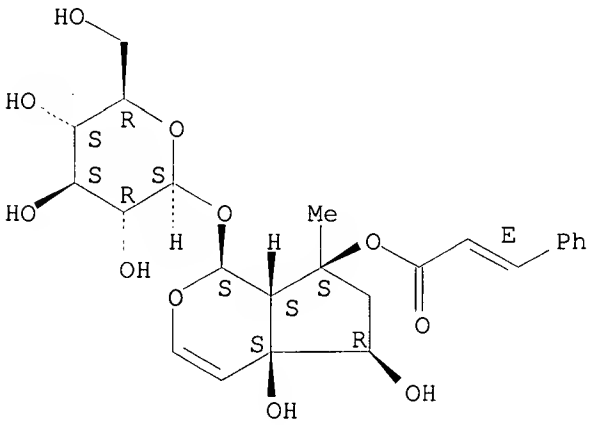
F-13385, Fr.
SOURCE: Planta Medica (1997), 63(2), 171-176
CODEN: PLMEAA; ISSN: 0032-0943
PUBLISHER: Thieme
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The iridoids of H. procumbens and H. zeyheri were studied by HPLC. Harpagoside is the main iridoid for both drugs, whereas 8-p-coumaroylharpagide is a representative iridoid of H. zeyheri only. The ratio harpagoside/8-p-coumaroylharpagide can be used to distinguish chem. both species. For com. dried aq. exts., this ratio is intermediate because they are probably prepd. from a mixt. of H. procumbens and H. zeyheri drugs. The aq. exts. of both drugs show similar analgesic and anti-inflammatory properties. H. procumbens and H. zeyheri should be accepted as sources for the drug harpagophyti radix.

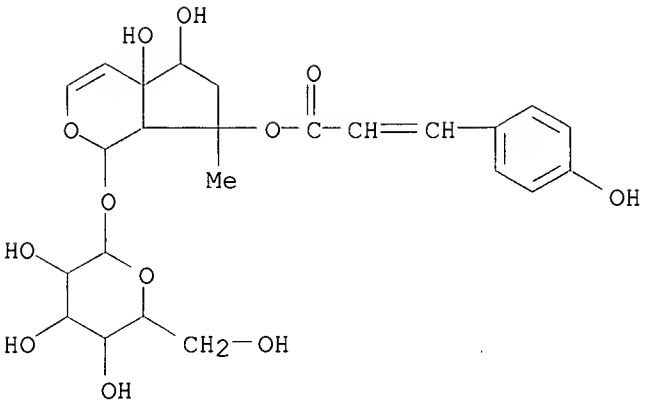
IT **19210-12-9**, Harpagoside **87686-74-6**
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
(detn. and anti-inflammatory and analgesic activities of Harpagophytum)

RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 87686-74-6 CAPLUS
CN .beta.-D-Glucopyranoside, 1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-[[3-(4-hydroxyphenyl)-1-oxo-2-propenyl]oxy]-7-methylcyclopenta[c]pyran-1-yl, (1S,4aS,5R,7S,7aS)- (9CI) (CA INDEX NAME)



L33 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:580743 CAPLUS
DOCUMENT NUMBER: 111:180743
TITLE: Pharmaceuticals for the treatment of rheumatism and inflammatory states containing Harpagophytum and selenium and zinc
INVENTOR(S): Moati, Roger Elie
PATENT ASSIGNEE(S): Fr.
SOURCE: Fr. Demande, 5 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2614791	A1	19881110	FR 1987-6450	19870507
FR 2614791	B1	19890721		

translate

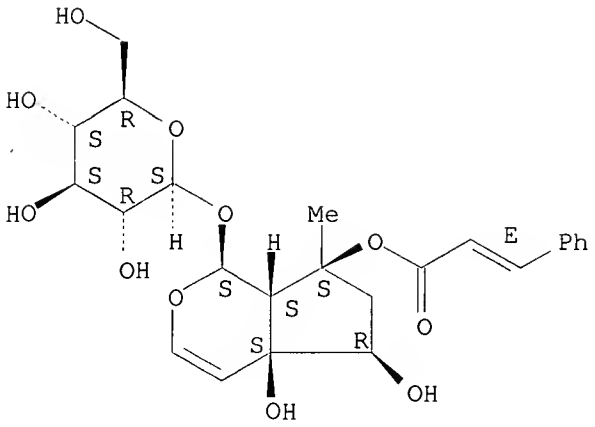
AB A pharmaceutical for the treatment of rheumatism and inflammatory states comprises the plant Harpagophytum contg. 4% harpagoside in assocn. with Se or Zn with an appropriate support for the minerals such as yeast.

IT **19210-12-9**, Harpagoside
RL: BIOL (Biological study)
(antiinflammatory and antirheumatic pharmaceuticals contg. selenium and zinc and)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L33 ANSWER 15 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2002169863 EMBASE
TITLE: [Herbal antirheumatics in treatment of pain]. SCHMERZBEHANDLUNG MIT PFLANZLICHEN ANTIRHEUMATIKA.
AUTHOR: Chrubasik S.; Pollak S.
CORPORATE SOURCE: Dr. S. Chrubasik, Institut fur Rechtsmedizin, Universitat Freiburg, Albertstrasse 9, D-79104 Freiburg, Germany. chrubasi@ruf.uni-freiburg.de
SOURCE: Wiener Medizinische Wochenschrift, (2002) 152/7-8 (198-203).
Refs: 54
ISSN: 0043-5341 CODEN: WMWOA4
COUNTRY: Austria
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
037 Drug Literature Index
LANGUAGE: German
SUMMARY LANGUAGE: English; German

AB Herbal antirheumatics are indicated in painful inflammatory and degenerative rheumatic diseases. Their mechanism of action is broader than that of synthetic antirheumatics. Particular preparations from Devils's Claw with 50 to 100 mg of harpagoside in the daily dosage as well as a particular willow bark extract with 120 to 240 mg salicin in the daily dosage proved efficacy in a number of clinical studies including confirmatory ones. Exploratory studies indicate that these herbal antirheumatics were not inferior to the selective COX-2 inhibitor rofecoxib when treating acute exacerbations of chronic low back pain. For the proprietary nettle root extract IDS23 promising in vitro/in vivo results indicate an anti-inflammatory effect, however there are only 2 open uncontrolled clinical studies available and the proof of efficacy is still missing. Safety data in order to recommend use during pregnancy and lactation are only available for the herbal combination product Phytodolor.RTM. prepared from aspen, ash and goldenrod. In principle, blackcurrent leaf with not less than 1.5% flavonoids may be an appropriate antirheumatic. Likewise, the seed oils of blackcurrent, evening primrose and borage offering at least 1 to 3 g gammalinolenic acid/day are recommendable. In case superiority versus placebo has been established, proprietary herbal antirheumatics should be administered before the conventional analgesics due to the lower incidence of adverse events.

L33 ANSWER 16 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2002211726 EMBASE
TITLE: ["Audiatur et altera pars" Discussion about harpagophytum procumbens].
.mchgt.AUDIATUR ET ALTERA PARS.mchlt. TEUFELSKRALLE IN DER DISKUSSION.
AUTHOR: Chrubasik S.; Conradt C.
CORPORATE SOURCE: Dr. S. Chrubasik, Institut fur Rechtsmedizin, Universitat Freiburg, Albertstr. 9, 79104 Freiburg, Germany
SOURCE: Zeitschrift fur Phytotherapie, (2002) 23/2 (84-86).
Refs: 16
ISSN: 0722-348X CODEN: ZPHYDG
COUNTRY: Germany
DOCUMENT TYPE: Journal; (Short Survey)
FILE SEGMENT: 031 Arthritis and Rheumatism
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: German

L33 ANSWER 17 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2002190825 EMBASE
TITLE: Devil's claw.
AUTHOR: Bedard M.
CORPORATE SOURCE: M. Bedard, Chief Clinical Pharmacist, Ottawa Hospital, Civic Campus, Ottawa, Ont., Canada
SOURCE: Canadian Pharmaceutical Journal, (2001) 134/10 (20+32).
Refs: 8
ISSN: 0828-6914 CODEN: CPJOAC
COUNTRY: Canada
DOCUMENT TYPE: Journal; (Short Survey)
FILE SEGMENT: 030 Pharmacology
031 Arthritis and Rheumatism
037 Drug Literature Index
038 Adverse Reactions Titles
048 Gastroenterology
LANGUAGE: English

L33 ANSWER 18 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001241116 EMBASE
TITLE: [Devil's claw (Harpagophytum procumbens) - An antirheumatic drug which grows in Kalahari sand].
RHEUMAMITTEL IM KALAHARISAND.
AUTHOR: Berg C.; Gensthaler B.M.
CORPORATE SOURCE: Dr. C. Berg, Alte Rabenstrasse 8, 20148 Hamburg, Germany.
chris-berg@t-online.de
SOURCE: Pharmazeutische Zeitung, (14 Jun 2001) 146/24 (10-15).
ISSN: 0031-7136 CODEN: PZSED5
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: German

L33 ANSWER 19 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000038238 EMBASE
TITLE: [The African devil's claw (Harpagophytum procumbens)].
DIE AFRIKANISCHE TEUFELSKRALLE.
AUTHOR: Hansen C.
SOURCE: Deutsche Apotheker Zeitung, (13 Jan 2000) 140/2 (85-89).
Refs: 28
ISSN: 0011-9857 CODEN: DAZEA2

COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: German

L33 ANSWER 20 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000063109 EMBASE
TITLE: Phyto-anti-inflammatories: A systemic review of randomized, placebo- controlled, double-blind trials.
AUTHOR: Ernst E.; Chrubasik S.
CORPORATE SOURCE: Dr. E. Ernst, University of Exeter, 25 Victoria Park Road, Exeter EX2 4NT, United Kingdom. E.Ernst@ex.ac.uk
SOURCE: Rheumatic Disease Clinics of North America, (2000) 26/1 (13-27).
Refs: 58
ISSN: 0889-857X CODEN: RDCAEK
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 031 Arthritis and Rheumatism
033 Orthopedic Surgery
037 Drug Literature Index
038 Adverse Reactions Titles
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Herbal treatments are often used to treat rheumatic symptoms. This systematic review is aimed at determining the clinical efficacy of this approach. Computer literature searches are carried out to locate all placebo- controlled, double-blind, randomized trials in this area. Nineteen studies meet the inclusion criteria. They are heterogeneous in terms of remedies tested, patients treated, and trial methodology applied. Most of the studies suggest that herbal remedies can have symptomatic effects beyond placebo. It is concluded that phyto-anti-inflammatories have considerable, albeit under- researched, potential in the symptomatic treatment of rheumatic disorders.

L33 ANSWER 21 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1999135496 EMBASE
TITLE: Treatment of rheumatic pain with kampo medicine in Europe. Part 1. Harpagophytum procumbens.
AUTHOR: Chrubasik S.; Eisenberg E.
CORPORATE SOURCE: Dr. S. Chrubasik, Department of Pharmaceutical Biology, University of Heidelberg, Im Neuenheimer Feld 364, 69120 Heidelberg, Germany
SOURCE: Pain Clinic, (1999) 11/3 (171-178).
Refs: 27
ISSN: 0169-1112 CODEN: PACLEA
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 031 Arthritis and Rheumatism
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
AB To date there are enough data available to classify preparations from the root of Harpagophytum procumbens among the rational anti-rheumatics, but only insofar as the moment of iridoid glycosides in the daily recommended dosage, especially that of harpagoside, is sufficient to alleviate rheumatic pain. Data on the biopharmaceutical quality of the preparations, on their anti-rheumatic effectiveness as proven in pharmacological and clinical studies, and on their safety in clinical use indicate that the

treatment of osteoarthritic pain with Harpagophytum extract should be - together with other rational phytotherapeutics - the first step in the treatment of rheumatic pain. Fewer adverse side-effects accompany the Harpagophytum treatment as compared to treatment with NSAIDs. Optimization of the extract and assessment of the optimal daily dosage are now required.

L33 ANSWER 22 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1998143154 EMBASE
TITLE: Traditional herbal therapy for the treatment of rheumatic pain: Preparations from devil's claw and stinging nettle.
AUTHOR: Chrubasik S.; Wink M.
CORPORATE SOURCE: Dr. S. Chrubasik, Department of Pharmaceutical Biology, University of Heidelberg, Heidelberg, Germany
SOURCE: Pain Digest, (1998) 8/2 (94-101).
Refs: 23
ISSN: 0938-9016 CODEN: PADIE6
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 024 Anesthesiology
030 Pharmacology
031 Arthritis and Rheumatism
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English

L33 ANSWER 23 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 94195202 EMBASE
DOCUMENT NUMBER: 1994195202
TITLE: Structural considerations on the iridoids as anti-inflammatory agents.
AUTHOR: Del Carmen Recio M.; Giner R.M.; Manez S.; Rios J.L.
CORPORATE SOURCE: Departament de Farmacologia, Facultat de Farmacia, Universitat de Valencia, Avda. Vicent Andres Estelles s/n,E-46100 Burjassot, Valencia, Spain
SOURCE: Planta Medica, (1994) 60/3 (232-234).
ISSN: 0032-0943 CODEN: PLMEAA
COUNTRY: Germany
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Twelve iridoid glycosides have been evaluated for their anti-inflammatory activity on two models: the carrageenan-induced mouse paw edema and the TPA- induced mouse ear edema. Loganic acid was the most active (44.4% edema inhibition) on the former test, whereas the catalpol derivative mixture isolated from Scrophularia, aucubin, verbenalin, and loganin, showed the hightest activity (from 72.0 to 80.0% edema inhibition) on the latter. The results allowed us to establish the relationship between the structure and anti-inflammatory activity on the basis of the different patterns of substitution, particularly hydroxylation, unsaturation, and acylation.

L33 ANSWER 24 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 89136236 EMBASE
DOCUMENT NUMBER: 1989136236
TITLE: [Harpagophyti radix: is it really a wonder drug?]. HARPAGOPHYTI RADIX - WIRKLICH EINE WUNDERDROGE?.
AUTHOR: Jaspersen-Schib R.
CORPORATE SOURCE: Switzerland

SOURCE: Schweizerische Apotheker Zeitung, (1989) 127/11 (265-270).
ISSN: 0036-7508 CODEN: SAZTA8
COUNTRY: Switzerland
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: German
SUMMARY LANGUAGE: French

L33 ANSWER 25 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 87077731 EMBASE
DOCUMENT NUMBER: 1987077731
TITLE: [Harpagophytum spp.].
HARPAGOPHYTUM - TEUFELSKRALLE.
AUTHOR: Czygan F.-C.
CORPORATE SOURCE: Institut fur Botanik und Pharmazeutische Biologie der Universitat Wurzburg, 8700 Wurzburg, Germany
SOURCE: Zeitschrift fur Phytotherapie, (1987) 8/1 (17-20).
CODEN: ZPHYDG
COUNTRY: Germany
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: German

L33 ANSWER 26 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 78156706 EMBASE
DOCUMENT NUMBER: 1978156706
TITLE: [A drug in demand at the present time; Harpagophytum procumbens].
DIE AKTUELLE DROGE: HARPAGOPHYTUM PROCUMBENS.
AUTHOR: Sticher O.
CORPORATE SOURCE: Pharmazeut. Inst., ETH Zent., Zurich, Switzerland
SOURCE: Deutsche Apotheker Zeitung, (1977) 117/32 (1279-1284).
CODEN: DAZEA2
COUNTRY: Germany
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
LANGUAGE: German
SUMMARY LANGUAGE: English

=> file home
FILE 'HOME' ENTERED AT 15:19:10 ON 22 AUG 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623kxg

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

```
 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Apr 08  "Ask CAS" for self-help around the clock
 NEWS  3  Apr 09  BEILSTEIN: Reload and Implementation of a New Subject Area
 NEWS  4  Apr 09  ZDB will be removed from STN
 NEWS  5  Apr 19  US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
 NEWS  6  Apr 22  Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
 NEWS  7  Apr 22  BIOSIS Gene Names now available in TOXCENTER
 NEWS  8  Apr 22  Federal Research in Progress (FEDRIP) now available
 NEWS  9  Jun 03  New e-mail delivery for search results now available
 NEWS 10  Jun 10  MEDLINE Reload
 NEWS 11  Jun 10  PCTFULL has been reloaded
 NEWS 12  Jul 02  FOREGE no longer contains STANDARDS file segment
 NEWS 13  Jul 22  USAN to be reloaded July 28, 2002;
                  saved answer sets no longer valid
 NEWS 14  Jul 29  Enhanced polymer searching in REGISTRY
 NEWS 15  Jul 30  NETFIRST to be removed from STN
 NEWS 16  Aug 08  CANCERLIT reload
 NEWS 17  Aug 08  PHARMAMarketLetter(PHARMAML) - new on STN
 NEWS 18  Aug 08  NTIS has been reloaded and enhanced
 NEWS 19  Aug 19  Aquatic Toxicity Information Retrieval (AQUIRE)
                  now available on STN
 NEWS 20  Aug 19  IFIPAT, IFICDB, and IFIUDB have been reloaded
 NEWS 21  Aug 19  The MEDLINE file segment of TOXCENTER has been reloaded
 NEWS 22  Aug 26  Sequence searching in REGISTRY enhanced
 NEWS 23  Sep 03  JAPIO has been reloaded and enhanced
 NEWS 24  Sep 16  Experimental properties added to the REGISTRY file
 NEWS 25  Sep 16  Indexing added to some pre-1967 records in CA/CAPLUS
 NEWS 26  Sep 16  CA Section Thesaurus available in CAPLUS and CA
 NEWS 27  Oct 01  CASREACT Enriched with Reactions from 1907 to 1985

 NEWS EXPRESS  February 1 CURRENT WINDOWS VERSION IS V6.0d,
               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

```
FILE 'HOME' ENTERED AT 13:38:03 ON 11 OCT 2002

=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'CAPLUS' ENTERED AT 13:38:34 ON 11 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 11 Oct 2002  VOL 137 ISS 16
FILE LAST UPDATED: 10 Oct 2002  (20021010/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> s harpagide
           116 HARPAGIDE
             3 HARPAGIDES
L1         116 HARPAGIDE
                (HARPAGIDE OR HARPAGIDES)

=> s l1 and arthritis
         26648 ARTHRITIS
             2 ARTHRITISES
         26648 ARTHRITIS
                (ARTHRITIS OR ARTHRITISES)
L2           2 L1 AND ARTHRITIS

=> dis l2 1-2 bib abs

L2   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
AN   2002:591953  CAPLUS
DN   137:159305
TI   2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-
     .beta.-D-galactopyranosyl]glycerol and pharmaceutical formulations
     containing it
IN   Shin, Jun Shik; Kim, Sang Tae; Hahn, Yong Nam
PA   Japan
SO   Jpn. Kokai Tokkyo Koho, 30 pp.
     CODEN: JKXXAF
DT   Patent
```

LA Japanese
FAN.CNT 1

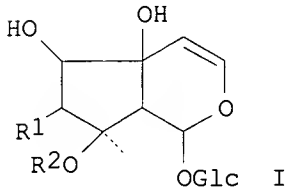
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002220400	A2	20020809	JP 2001-365399	20011129
PRAI	KR 2000-71438	A	20001129		

AB Pharmaceutical formulations for treatment of osteoporosis, **arthritis**, or intervertebral disk hernia, contain 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol (I) or its esters as active ingredients. I (420 mg) was purified from an EtOH ext. of 1848 g Cibotium barometz root powder. Administration of I at 75 .mu.g/mL p.o. for 2 wk prevented mouse paw edema induced by Zymosan A and Freund's adjuvant. Formulation examples of injections, tablets, capsules, and liqs. contg. I or I acetate are given.

L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 2002:533182 CAPLUS
DN 137:88448
TI Use of **harpagide**-related compounds for prevention and treatment of osteoporosis, **arthritis**, and intervertebral disk hernia, pharmaceutical compositions, and preparation of the compounds
IN Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PA S. Korea
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002201136	A2	20020716	JP 2001-365400	20011129
PRAI	KR 2000-71497	A	20001129		

OS MARPAT 137:88448
GI



I

AB **Harpagide**-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of osteoporosis, **arthritis**, and/or intervertebral disk diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). **Harpagide** (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. **harpagide** or harpagoside are given.

```
=> s l1 and osteoporosis
         10651 OSTEOPOROSIS
L3           3 L1 AND OSTEOPOROSIS

=> dis l3 1-3 bib abs
```

L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 2002:591953 CAPLUS
DN 137:159305
TI 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol and pharmaceutical formulations containing it
IN Shin, Jun Shik; Kim, Sang Tae; Hahn, Yong Nam
PA Japan
SO Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

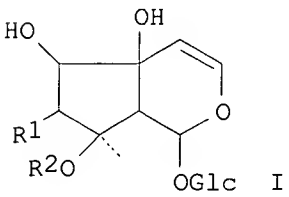
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002220400	A2	20020809	JP 2001-365399	20011129
PRAI	KR 2000-71438	A	20001129		

AB Pharmaceutical formulations for treatment of **osteoporosis**, arthritis, or intervertebral disk hernia, contain 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol (I) or its esters as active ingredients. I (420 mg) was purified from an EtOH ext. of 1848 g Cibotium barometz root powder. Administration of I at 75 .mu.g/mL p.o. for 2 wk prevented mouse paw edema induced by Zymosan A and Freund's adjuvant. Formulation examples of injections, tablets, capsules, and liqs. contg. I or I acetate are given.

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2002:533182 CAPLUS
DN 137:88448
TI Use of **harpagide**-related compounds for prevention and treatment of **osteoporosis**, arthritis, and intervertebral disk hernia, pharmaceutical compositions, and preparation of the compounds
IN Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PA S. Korea
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002201136	A2	20020716	JP 2001-365400	20011129
PRAI	KR 2000-71497	A	20001129		

OS MARPAT 137:88448
GI



I

AB **Harpagide**-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of **osteoporosis**, arthritis, and/or intervertebral disk diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). **Harpagide** (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and

liqs. contg. **harpagide** or harpagoside are given.

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2001:31340 CAPLUS
DN 134:95502
TI Compositions and methods for treating or preventing **osteoporosis**
IN Prince, Richard Lewis; Min, Xu
PA University of Western Australia, Australia; Guangzhou University of Traditional Chinese Medicine
SO PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001001996	A1	20010111	WO 2000-AU737	20000629
WO 2001001996	C2	20020912		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI AU 1999-1273 A 19990629
AB The invention relates to a therapeutic compn. and method for treating **osteoporosis** and other calcium, and/or estrogen related disorders. Examples are given for treating **osteoporosis** with exts. of plants such as Epimedium koreanum, Slavia miltiorrhiza, Asragalus membranaceus, Pueraria thomsonii, and Psoralea coryliofolia.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l1 and dis?
6924797 DIS?
L4 12 L1 AND DIS?

=> s l4 and intervertebral
761 INTERVERTEBRAL
L5 2 L4 AND INTERVERTEBRAL

=> s l5 and hernia
565 HERNIA
106 HERNIAS
2 HERNIAE
634 HERNIA
(HERNIA OR HERNIAS OR HERNIAE)
L6 2 L5 AND HERNIA

=> dis l6 1-2 bib abs

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 2002:591953 CAPLUS
DN 137:159305
TI 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol and pharmaceutical formulations containing it
IN Shin, Jun Shik; Kim, Sang Tae; Hahn, Yong Nam
PA Japan
SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

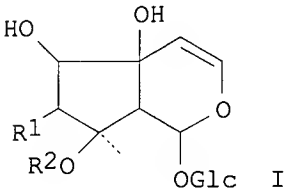
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002220400	A2	20020809	JP 2001-365399	20011129
PRAI KR 2000-71438	A	20001129		

AB Pharmaceutical formulations for treatment of osteoporosis, arthritis, or **intervertebral disk hernia**, contain 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol (I) or its esters as active ingredients. I (420 mg) was purified from an EtOH ext. of 1848 g Cibotium barometz root powder. Administration of I at 75 .mu.g/mL p.o. for 2 wk prevented mouse paw edema induced by Zymosan A and Freund's adjuvant. Formulation examples of injections, tablets, capsules, and liqs. contg. I or I acetate are given.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
AN 2002:533182 CAPLUS
DN 137:88448
TI Use of **harpagide**-related compounds for prevention and treatment of osteoporosis, arthritis, and **intervertebral disk hernia**, pharmaceutical compositions, and preparation of the compounds
IN Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PA S. Korea
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002201136	A2	20020716	JP 2001-365400	20011129
PRAI KR 2000-71497	A	20001129		

OS MARPAT 137:88448
GI

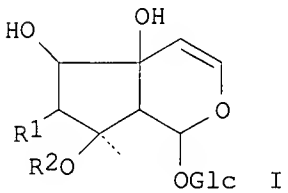


I

AB **Harpagide**-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of osteoporosis, arthritis, and/or **intervertebral disk diseases**. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). **Harpagide** (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. **harpagide** or harpagoside are given.

=> s l4 and rupture
37785 RUPTURE
1528 RUPTURES

```
         38843 RUPTURE
                 (RUPTURE OR RUPTURES)
L7           0 L4 AND RUPTURE

=> s l4 and vertebral
          2772 VERTEBRAL
L8           0 L4 AND VERTEBRAL

=> s 19210-12-9
   REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




L10         92 L9


=> s l10 and arthritis
          26648 ARTHRITIS
              2 ARTHRITISES
          26648 ARTHRITIS
                 (ARTHRITIS OR ARTHRITISES)
L11          4 L10 AND ARTHRITIS

=> dis l11 1-4 bib abs

L11  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2002 ACS
AN   2002:533182  CAPLUS
DN   137:88448
TI   Use of harpagide-related compounds for prevention and treatment of
     osteoporosis, arthritis, and intervertebral disk hernia,
     pharmaceutical compositions, and preparation of the compounds
IN   Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PA   S. Korea
SO   Jpn. Kokai Tokkyo Koho, 29 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
PI   JP 2002201136      A2   20020716      JP 2001-365400   20011129
PRAI KR 2000-71497      A    20001129
OS   MARPAT 137:88448
GI
```



I

```
AB   Harpagide-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are
     used for treatment or prevention of osteoporosis, arthritis,
     and/or intervertebral disk diseases.  I (R1 = H, lower alkyl; R2 =
```

cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). Harpagide (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. harpagide or harpagoside are given.

L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 2002:523037 CAPLUS
DN 137:149950
TI Comparison of outcome measures during treatment with the proprietary Harpagophytum extract Doloteffin in patients with pain in the lower back, knee or hip
AU Chrubasik, S.; Thanner, J.; Kunzel, O.; Conradt, C.; Black, A.; Pollak, S.
CS Department of Forensic Medicine, University of Freiburg, Freiburg, Germany
SO Phytomedicine (2002), 9(3), 181-194
CODEN: PYTOEY; ISSN: 0944-7113
PB Urban & Fischer Verlag GmbH & Co. KG
DT Journal
LA English
AB Besides checking ests. of effectiveness and safety of using the proprietary Harpagophytum ext. Doloteffin, this postmarketing surveillance compared various disease-specific and generic measures of effect. We enrolled 250 patients suffering from nonspecific low back pain (Back group: n = 104) or osteoarthritic pain in the knee (Knee group: n = 85) or hip (Hip group: n = 61). They took an 8-wk course of Doloteffin at a dose providing 60 mg harpagoside per day. The measures of effect on pain and disability included the percentage changes from baseline of established instruments (Arhus low back pain index, WOMAC index, German version of the HAQ) and unvalidated measures (total pain index, three score index, the patient's global assessment of the effectiveness of treatment). Patients also received a diary for the daily recording of their pain and any addnl. treatments for it. The three groups differed in age, wt. and characteristics of initial pain. 227 Patients completed the study. Multivariate anal. confirmed that several dimensions of effect were recorded by the several outcome measures but, in all groups, both the generic and disease-specific outcome measures improved by week 4 and further by 8. In multivariable anal., the improvement tended to be more when the initial pain and disability score was more: older patients tended to improve less than younger, the hip group tended to improve convincingly more than the back group, whereas the improvement in the knee group was less readily differentiated from that in the back group. The subgroup of Back patients who required NSAIDs during the 8 wk used significantly more per patient than patients in the other two groups, but that requirement also declined more with time. About 10% of the patients suffered from minor adverse events that could possibly have been attributable to Doloteffin. Between 50% and 70% of the patients benefitted from Doloteffin with few adverse effects. Thus, Doloteffin is well worth considering for osteoarthritic knee and hip pain and nonspecific low back pain.
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 2001:911084 CAPLUS
DN 136:19391
TI Health food supplement for osteoarthritis and **arthritis**
IN Shimomura, Yasushi; Ozawa, Mitsuru
PA I Ferm K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	JP 2001346545	A2	20011218	JP 2000-172296	20000608

AB The health food is prepd. from glucosamine with the addn. of ext. of selected from Harpagophytum procumbens (raiongoron) contg. antiinflammatory harpagoside , Salix alba (white willow), and Zingiber officinale contg. analgestic gingerol. The health food supplement is useful for fast redn. of pain and inflammation.

L11 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 1970:109479 CAPLUS
DN 72:109479
TI Antiphlogistic, analgetic, and spasmolytic effects of harpagosidea glycoside from Harpagophytum procumbens roots
AU Eichler, Oskar; Koch, Christa
CS Pharmakol. Inst., Univ. Heidelberg, Heidelberg, Ger.
SO Arzneim.-Forsch. (1970), 20(1), 107-9
CODEN: ARZNAD
DT Journal
LA German
AB The antirheumatic activity of the whole ext., the iso-lated glycoside, an d also the glycoside split by emulsion of the South African plant H. pr ocumbens were tested by 6 screening methods and results compared with those obtained with phenyl-butazone (I). All 3 prepns. produced a significant decrease in the swelling of formalin (0.15 ml 2% HCHO) produced **arthritis** in the rat. However, when the edema was produced by injecting 0.2 ml HCHO, the gly coside harpagoside did not elicit any sig-nificant effect. The granuloma pouch test was pos. for the har-pagoside and for the split glycoside, similar to those with I. An analgetic effect comparable to I was obtained only with harpa-goside, while the spasmolytic activity was neg.

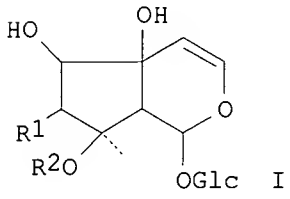
```
=> s l10 and osteoporosis
         10651 OSTEOPOROSIS
L12          1 L10 AND OSTEOPOROSIS

=> s l10 and hernia
           565 HERNIA
           106 HERNIAS
             2 HERNIAE
           634 HERNIA
                 (HERNIA OR HERNIAS OR HERNIAE)
L13          1 L10 AND HERNIA

=> s l13 and disk
         92570 DISK
         46321 DISKS
        117665 DISK
                 (DISK OR DISKS)
L14          1 L13 AND DISK

=> dis l14 bib abs
```

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 2002:533182 CAPLUS
DN 137:88448
TI Use of harpagide-related compounds for prevention and treatment of osteoporosis, arthritis, and intervertebral **disk hernia** , pharmaceutical compositions, and preparation of the compounds
IN Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PA S. Korea
SO Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002201136	A2	20020716	JP 2001-365400	20011129
PRAI	KR 2000-71497	A	20001129		

OS MARPAT 137:88448
GI



I

AB Harpagide-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of osteoporosis, arthritis, and/or intervertebral **disk** diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). Harpagide (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. harpagide or harpagoside are given.

```
=> file medline
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    21.17      53.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -3.10      -7.44

FILE 'MEDLINE' ENTERED AT 13:45:32 ON 11 OCT 2002

 FILE LAST UPDATED: 10 OCT 2002 (20021010/UP).  FILE COVERS 1958 TO DATE.

 On June 9, 2002, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2002 vocabulary.  Enter HELP THESAURUS for details.

 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.

=> sl10 and arthritis
SL10 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s 110 and arthritis
            15 L9
         94413 ARTHRITIS
             6 ARTHRITISES
         94414 ARTHRITIS
                 (ARTHRITIS OR ARTHRITISES)
L15          0 L10 AND ARTHRITIS
```

```
=> s l10 and osteoporosis
           15 L9
        25928 OSTEOPOROSIS
L16         0 L10 AND OSTEOPOROSIS

=> s l10 and hernia
           15 L9
        29216 HERNIA
         5239 HERNIAS
          236 HERNIAE
        30089 HERNIA
                (HERNIA OR HERNIAS OR HERNIAE)
L17         0 L10 AND HERNIA

=> s l10 and dis?
           15 L9
      4816381 DIS?
L18         5 L10 AND DIS?

=> dis l18 1-5 bib abs

L18  ANSWER 1 OF 5     MEDLINE
AN   2001152498     MEDLINE
DN   21033374   PubMed ID: 11185727
TI   Efficacy and tolerance of Harpagophytum procumbens versus diacerhein in
     treatment of osteoarthritis.
AU   Chantre P; Cappelaere A; Leblan D; Guedon D; Vandermander J; Fournie B
CS   Laboratoires Arkopharma, Carros, France.
SO   PHYTOMEDICINE, (2000 Jun) 7 (3) 177-83.
     Journal code: 9438794. ISSN: 0944-7113.
CY   Germany: Germany, Federal Republic of
DT   (CLINICAL TRIAL)
     Journal; Article; (JOURNAL ARTICLE)
     (MULTICENTER STUDY)
     (RANDOMIZED CONTROLLED TRIAL)
LA   English
FS   Priority Journals
EM   200103
ED   Entered STN: 20010404
     Last Updated on STN: 20010404
     Entered Medline: 20010322
AB   In a double-blind, randomized, multicentre clinical study, the efficacy
     and tolerance of a herbal medicine product, Harpadol (6 capsules/day, each
     containing 435 mg of powdered cryoground powder Harpagophytum procumbens),
     was compared with diacerhein 100 mg/day in the treatment, for 4 months, of
     122 patients suffering from osteoarthritis of the knee and hip.
     Assessments of pain and functional disability were made on a 10
     cm horizontal visual analogue scale; severity of osteoarthritis was
     evaluated by Lequesne's index. Spontaneous pain showed a significant
     improvement during the course of the study and there was no difference in
     the efficacy of the two treatments. Similarly, there was a progressive and
     significant reduction in the Lequesne functional index and no statistical
     difference was found between Harpadol and diacerhein. At completion of the
     study, patients taking Harpadol were using significantly less NSAIDs and
     antalgic drugs. The frequency of adverse events was significantly lower in
     the Harpadol group. The most frequent event reported was diarrhea,
     occurring in 8.1% and 26.7% of Harpadol and diacerhein patients
     respectively. The global tolerance assessment by patients at the end of
     treatment favoured Harpadol. The results of this study demonstrate that
     Harpadol is comparable in efficacy and superior in safety to diacerhein.

L18  ANSWER 2 OF 5     MEDLINE
AN   2001147920     MEDLINE
```

DN 21072444 PubMed ID: 11204183
TI Seasonal variations in the harpagoside content of Scrophularia scorodonia L.
AU De Santos Galindez J; Matellano L F; Lanza A M; Castillo L V
CS Departamento de Farmacologia, Facultad de Farmacia, Universidad de Alcala, Madrid, Espana.
SO ZEITSCHRIFT FUR NATURFORSCHUNG. SECTION C. JOURNAL OF BIOSCIENCES, (2000 Nov-Dec) 55 (11-12) 1035-7.
Journal code: 8912155. ISSN: 0341-0382.
CY Germany: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200103
ED Entered STN: 20010404
Last Updated on STN: 20010404
Entered Medline: 20010315
AB Seasonal variations on the content of harpagoside in Scrophularia scorodonia L. (Scrophulariaceae) were investigated using plants collected monthly from January to December in 1995. During growth of this species the percentage of harpagoside was the highest during the maximum development of the plant, specially in July. Harpagoside levels differed among leaves, stems and flowers of S. scorodonia. Leaves were **distinguished** from other plant parts by higher levels of harpagoside. Drying at ambient temperature influenced the yield of harpagoside compared with the results of plant drying by microwave.

L18 ANSWER 3 OF 5 MEDLINE
AN 2001122331 MEDLINE
DN 21017590 PubMed ID: 11143915
TI Harpagophytum procumbens in the treatment of knee and hip osteoarthritis. Four-month results of a prospective, multicenter, double-blind trial versus diacerhein.
AU Leblan D; Chantre P; Fournie B
CS Laboratoires Arkopharma, Carros, France.
SO JOINT, BONE, SPINE, (2000) 67 (5) 462-7.
Journal code: 100938016. ISSN: 1297-319X.
CY France
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 200102
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010222
AB OBJECTIVE: To evaluate the efficacy and safety of Harpagophytum in the treatment of hip and knee osteoarthritis comparatively with the slow-acting drug for osteoarthritis, diacerhein. PATIENTS AND METHODS: A multicenter, randomized, double-blind, parallel-group study was conducted in 122 patients with hip and/or knee osteoarthritis. Treatment duration was four months and the primary evaluation criterion was the pain score on a visual analog scale. Harpagophytum 2,610 mg per day was compared with diacerhein 100 mg per day. RESULTS: After four months, considerable improvements in osteoarthritis symptoms were seen in both groups, with no significant differences for pain, functional **disability**, or the Lequesne score. However, use of analgesic (acetaminophen-caffeine) and nonsteroidal anti-inflammatory (diclofenac) medications was significantly reduced in the Harpagophytum group, which also had a significantly lower rate of adverse events. CONCLUSION: In this study, Harpagophytum was at least as effective as a reference drug (diacerhein) in the treatment of knee or hip osteoarthritis and reduced the need for analgesic and

nonsteroidal anti-inflammatory therapy.

L18 ANSWER 4 OF 5 MEDLINE
AN 2000180741 MEDLINE
DN 20180741 PubMed ID: 10715851
TI Physicochemical properties of harpagoside and its in vitro release from Harpagophytum procumbens extract tablets.
AU Chrubasik S; Sporer F; Dillmann-Marschner R; Friedmann A; Wink M
CS Institut fur Pharmazeutische Biologie, University of Heidelberg, Germany.. chrubasi@uni-freiburg.de
SO PHYTOMEDICINE, (2000 Jan) 6 (6) 469-73.
Journal code: 9438794. ISSN: 0944-7113.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200003
ED Entered STN: 20000413
Last Updated on STN: 20000413
Entered Medline: 20000331
AB The objective of this investigation was to characterize the active-component harpagoside of Harpagophytum extract from a physico-chemical perspective and to determine its in-vitro release from tablets according to DAB 1996. It was found that both pure harpagoside and harpagoside in Harpagophytum extract have an octanol-water **distribution** coefficient of approximately 4 which is neither dependent on temperature nor on pH. The mean harpagoside content in Harpagophytum tablets of Batch 9102 was 16.4 mg (S.D. 0.2; S.E. 0.03). Related to a tablet weight of 365 mg (100%), this corresponds to a haragoside content of 4.5% (S.D. 0.049; S.E. 0.006). On average the tablets **disintegrate** after 18 +/- 3 minutes (mean +/- SD). The tablets taken from Batch 9102 released the active component harpagoside well, with a t50 of 13.5 min, a t90 of 23 min and a t95 of 25 min in relation to 16.5 mg of harpagoside per dose. Harpagoside content decreased by about 10% in artificial gastric fluid within a period of 3 hours and remained stable in artificial intestinal fluid for a period of 6 hours.

L18 ANSWER 5 OF 5 MEDLINE
AN 1999201845 MEDLINE
DN 99201845 PubMed ID: 10101629
TI Effectiveness of Harpagophytum extract WS 1531 in the treatment of exacerbation of low back pain: a randomized, placebo-controlled, double-blind study.
AU Chrubasik S; Junck H; Breitschwerdt H; Conradt C; Zappe H
CS Department of Medical Biometry, University of Heidelberg, Germany.
SO EUROPEAN JOURNAL OF ANAESTHESIOLOGY, (1999 Feb) 16 (2) 118-29.
Journal code: 8411711. ISSN: 0265-0215.
CY ENGLAND: United Kingdom
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 199905
ED Entered STN: 19990607
Last Updated on STN: 19990607
Entered Medline: 19990527
AB Two daily doses of oral Harpagophytum extract WS 1531 (600 and 1200, respectively, containing 50 and 100 mg of the marker harpagoside) were compared with placebo over 4 weeks in a randomized, double-blind study in 197 patients with chronic susceptibility to back pain and current exacerbations that were producing pain worse than 5 on a 0-10 visual analogue scale. The principal outcome measure, based on pilot studies, was the number of patients who were pain free without the permitted rescue

medication (tramadol) for 5 days out of the last week. The treatment and placebo groups were well matched in physical characteristics, in the severity of pain, duration, nature and accompaniments of their pain, the Arhus low back pain index and in laboratory indices of organ system function. A total of 183 patients completed the study. The numbers of pain-free patients were three, six and 10 in the placebo group (P), the Harpagophytum 600 group (H600) and the Harpagophytum 1200 group (H1200) respectively ($P = 0.027$, one-tailed Cochrane-Armitage test). The majority of responders' were patients who had suffered less than 42 days of pain, and subgroup analyses suggested that the effect was confined to patients with more severe and radiating pain accompanied by neurological deficit. However, subsidiary analyses, concentrating on the current pain component of the Arhus index, painted a slightly different picture, with the benefits seeming, if anything, to be greatest in the H600 group and in patients without more severe pain, radiation or neurological deficit. Patients with more pain tended to use more tramadol, but even severe and unbearable pain would not guarantee that tramadol would be used at all, and certainly not to the maximum permitted dose. There was no evidence for Harpagophytum-related side-effects, except possibly for mild and infrequent gastrointestinal symptoms.

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623kxg

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 27	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985

NEWS EXPRESS	February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 20:33:02 ON 10 OCT 2002

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 20:33:12 ON 10 OCT 2002

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 OCT 2002 HIGHEST RN 460312-12-3
DICTIONARY FILE UPDATES: 9 OCT 2002 HIGHEST RN 460312-12-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

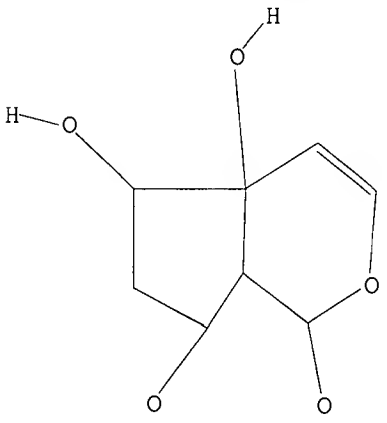
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 09995691-1.str

L1 STRUCTURE UPLOADED

=> d 11
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sam

SAMPLE SEARCH INITIATED 20:33:53 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2725 TO ITERATE

36.7% PROCESSED 1000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

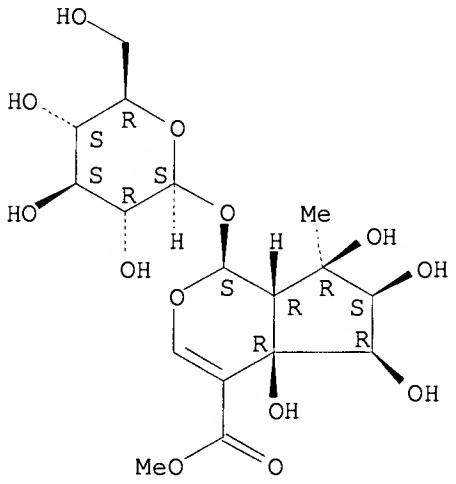
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 51370 TO 57630
PROJECTED ANSWERS: 1 TO 153

L2 1 SEA SSS SAM L1

=> d scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN Cyclopenta[c]pyran-4-carboxylic acid, 1-(.beta.-D-glucopyranosyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5,6,7-tetrahydroxy-7-methyl-, methyl ester, (1S,4aR,5R,6S,7R,7aR)- (9CI)
MF C17 H26 O13

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s l1 sss full
FULL SEARCH INITIATED 20:34:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 57148 TO ITERATE

100.0% PROCESSED 57148 ITERATIONS 66 ANSWERS
SEARCH TIME: 00.00.02

L3 66 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 141.04 141.25

FILE 'CAPLUS' ENTERED AT 20:34:59 ON 10 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 10 Oct 2002 VOL 137 ISS 15
FILE LAST UPDATED: 9 Oct 2002 (20021009/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> s l3 and arthritis
           272 L3
         26641 ARTHRITIS
             2 ARTHRITISES
         26641 ARTHRITIS
                 (ARTHRITIS OR ARTHRITISES)
L4           5 L3 AND ARTHRITIS

=> dis l4 ibib abs hitstr
```

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:591953 CAPLUS
DOCUMENT NUMBER: 137:159305
TITLE: 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol and pharmaceutical formulations containing it
INVENTOR(S): Shin, Jun Shik; Kim, Sang Tae; Hahn, Yong Nam
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002220400	A2	20020809	JP 2001-365399	20011129
PRIORITY APPLN. INFO.:			KR 2000-71438 A	20001129

AB Pharmaceutical formulations for treatment of osteoporosis, **arthritis**, or intervertebral disk hernia, contain 2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-galactopyranosyl]glycerol (I) or its esters as active ingredients. I (420 mg) was purified from an EtOH ext. of 1848 g Cibotium

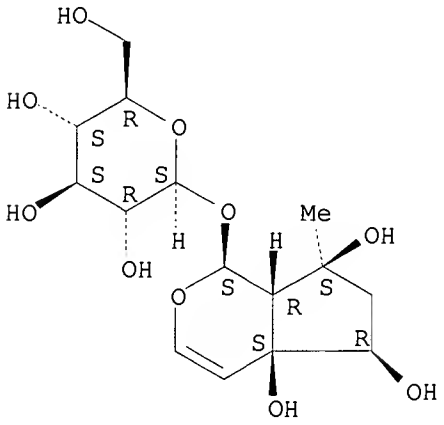
barometz root powder. Administration of I at 75 .mu.g/mL p.o. for 2 wk prevented mouse paw edema induced by Zymosan A and Freund's adjuvant. Formulation examples of injections, tablets, capsules, and liqs. contg. I or I acetate are given.

IT **6926-08-5**, Harpagide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceuticals contg. octadecadienoyl(galactopyranosylgalactopyranosyl)glycerol for treatment of osteoporosis, **arthritis**, and intervertebral disk hernia)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

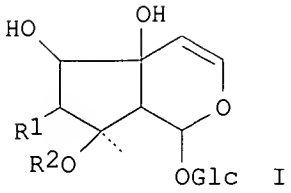


=> dis l4 2-5 ibib abs hitstr

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:533182 CAPLUS
DOCUMENT NUMBER: 137:88448
TITLE: Use of harpagide-related compounds for prevention and treatment of osteoporosis, **arthritis**, and intervertebral disk hernia, pharmaceutical compositions, and preparation of the compounds
INVENTOR(S): Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PATENT ASSIGNEE(S): S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201136	A2	20020716	JP 2001-365400	20011129

PRIORITY APPLN. INFO.: KR 2000-71497 A 20001129
OTHER SOURCE(S): MARPAT 137:88448
GI



I

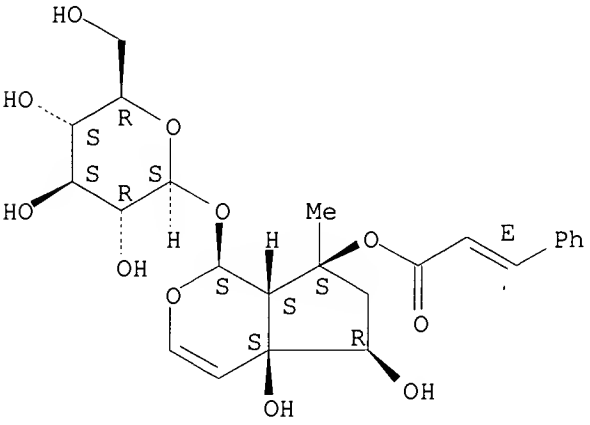
AB Harpagide-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of osteoporosis, **arthritis**, and/or intervertebral disk diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). Harpagide (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. harpagide or harpagoside are given.

IT **19210-12-9P**, Harpagoside
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(harpagide-related compds. for prevention and treatment of osteoporosis, **arthritis**, and intervertebral disk hernia)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

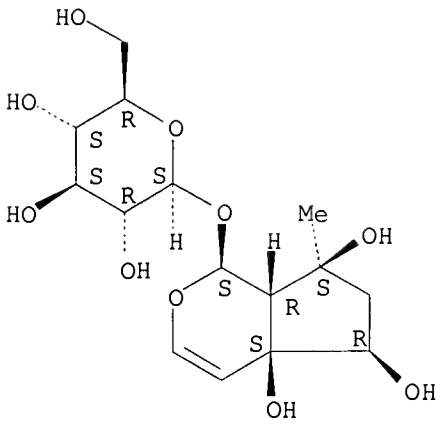


IT **6926-08-5P**, Harpagide
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(harpagide-related compds. for prevention and treatment of osteoporosis, **arthritis**, and intervertebral disk hernia)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:523037 CAPLUS
DOCUMENT NUMBER: 137:149950
TITLE: Comparison of outcome measures during treatment with the proprietary Harpagophytum extract Doloteffin in patients with pain in the lower back, knee or hip
AUTHOR(S): Chrubasik, S.; Thanner, J.; Kunzel, O.; Conradt, C.; Black, A.; Pollak, S.
CORPORATE SOURCE: Department of Forensic Medicine, University of Freiburg, Freiburg, Germany
SOURCE: Phytomedicine (2002), 9(3), 181-194
CODEN: PYTOEY; ISSN: 0944-7113
PUBLISHER: Urban & Fischer Verlag GmbH & Co. KG
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Besides checking ests. of effectiveness and safety of using the proprietary Harpagophytum ext. Doloteffin, this postmarketing surveillance compared various disease-specific and generic measures of effect. We enrolled 250 patients suffering from nonspecific low back pain (Back group: n = 104) or osteoarthritic pain in the knee (Knee group: n = 85) or hip (Hip group: n = 61). They took an 8-wk course of Doloteffin at a dose providing 60 mg harpagoside per day. The measures of effect on pain and disability included the percentage changes from baseline of established instruments (Arhus low back pain index, WOMAC index, German version of the HAQ) and unvalidated measures (total pain index, three score index, the patient's global assessment of the effectiveness of treatment). Patients also received a diary for the daily recording of their pain and any addnl. treatments for it. The three groups differed in age, wt. and characteristics of initial pain. 227 Patients completed the study. Multivariate anal. confirmed that several dimensions of effect were recorded by the several outcome measures but, in all groups, both the generic and disease-specific outcome measures improved by week 4 and further by 8. In multivariable anal., the improvement tended to be more when the initial pain and disability score was more: older patients tended to improve less than younger, the hip group tended to improve convincingly more than the back group, whereas the improvement in the knee group was less readily differentiated from that in the back group. The subgroup of Back patients who required NSAIDs during the 8 wk used significantly more per patient than patients in the other two groups, but that requirement also declined more with time. About 10% of the patients suffered from minor adverse events that could possibly have been attributable to Doloteffin. Between 50% and 70% of the patients benefitted from Doloteffin with few adverse effects. Thus, Doloteffin is well worth considering for osteoarthritic knee and hip pain and nonspecific low back pain.

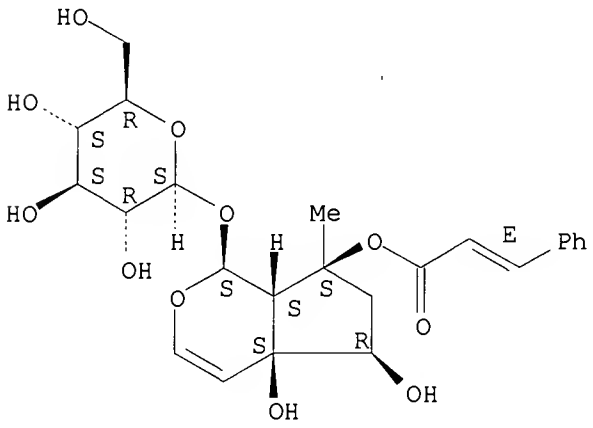
IT **19210-12-9**, Harpagoside

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparison of outcome measures during treatment with proprietary Harpagophytum ext. Doloteffin in patients with pain in lower back, knee or hip)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:911084 CAPLUS
DOCUMENT NUMBER: 136:19391
TITLE: Health food supplement for osteoarthritis and **arthritis**
INVENTOR(S): Shimomura, Yasushi; Ozawa, Mitsuru
PATENT ASSIGNEE(S): I Ferm K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001346545	A2	20011218	JP 2000-172296	20000608

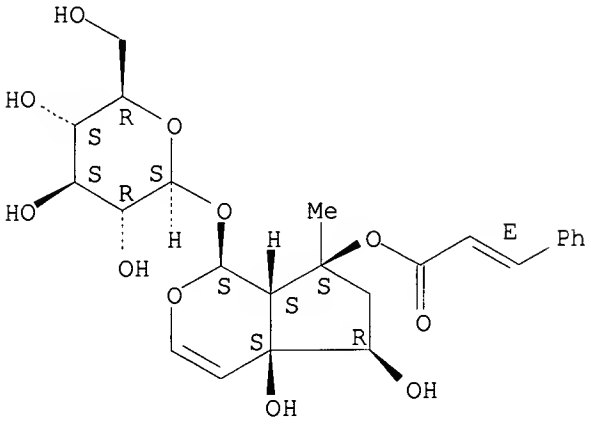
AB The health food is prepd. from glucosamine with the addn. of ext. of selected from Harpagophytum procumbens (raiongoron) contg. antiinflammatory harpagoside , Salix alba (white willow), and Zingiber officinale contg. analgestic gingerol. The health food supplement is useful for fast redn. of pain and inflammation.

IT **19210-12-9**, Harpagoside
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(health food supplement for osteoarthritis and **arthritis**)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

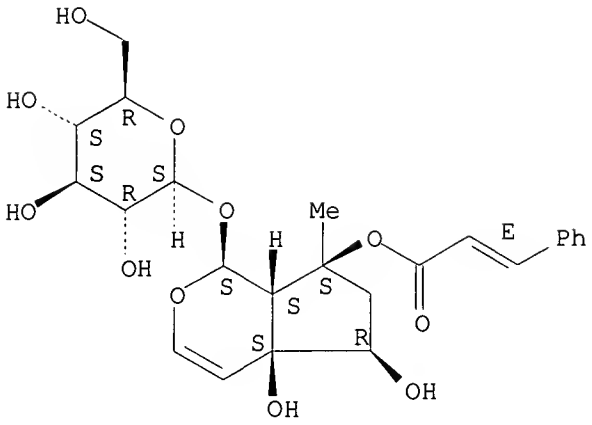


L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1970:109479 CAPLUS
DOCUMENT NUMBER: 72:109479
TITLE: Antiphlogistic, analgetic, and spasmolytic effects of harpagosidea glycoside from Harpagophytum procumbens roots
AUTHOR(S): Eichler, Oskar; Koch, Christa
CORPORATE SOURCE: Pharmakol. Inst., Univ. Heidelberg, Heidelberg, Ger.
SOURCE: Arzneim.-Forsch. (1970), 20(1), 107-9
CODEN: ARZNAD
DOCUMENT TYPE: Journal
LANGUAGE: German

AB The antirheumatic activity of the whole ext., the iso-lated glycoside, an d also the glycoside split by emulsion of the South African plant H. pr ocumbens were tested by 6 screening methods and results compared with those obtained with phenyl-butazone (I). All 3 prepns. produced a significant decrease in the swelling of formalin (0.15 ml 2% HCHO) produced **arthritis** in the rat. However, when the edema was produced by injecting 0.2 ml HCHO, the gly coside harpagoside did not elicit any sig-nificant effect. The granuloma pouch test was pos. for the har-pagoside and for the split glycoside, similar to those with I. An analgetic effect comparable to I was obtained only with harpa-goside, while the spasmolytic activity was neg.

IT **19210-12-9**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmacology of)
RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

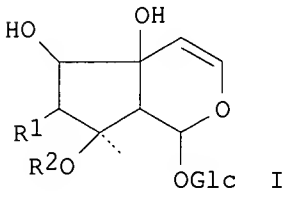


```
=> s l3 and composition
           272 L3
        594209 COMPOSITION
        242341 COMPOSITIONS
        832644 COMPOSITION
                 (COMPOSITION OR COMPOSITIONS)
       1174106 COMPN
        460706 COMPNS
       1431659 COMPN
                 (COMPN OR COMPNS)
       1864982 COMPOSITION
                 (COMPOSITION OR COMPN)
L5          23 L3 AND COMPOSITION

=> s l5 and diluent
         22339 DILUENT
          9322 DILUENTS
         28104 DILUENT
                 (DILUENT OR DILUENTS)
L6           0 L5 AND DILUENT

=> s l5 and lubricant
         54868 LUBRICANT
         48826 LUBRICANTS
         74153 LUBRICANT
                 (LUBRICANT OR LUBRICANTS)
L7           0 L5 AND LUBRICANT

=> s l5 and preservative
         22886 PRESERVATIVE
         22748 PRESERVATIVES
         35026 PRESERVATIVE
                 (PRESERVATIVE OR PRESERVATIVES)
L8           0 L5 AND PRESERVATIVE

=> dis l5 1-23 ibib abs hitstr

L5   ANSWER 1 OF 23  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:        2002:533182  CAPLUS
DOCUMENT NUMBER:         137:88448
TITLE:                   Use of harpagide-related compounds for prevention and
                         treatment of osteoporosis, arthritis, and
                         intervertebral disk hernia, pharmaceutical
                         compositions, and preparation of the compounds
INVENTOR(S):             Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
```

PATENT ASSIGNEE(S): S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201136	A2	20020716	JP 2001-365400	20011129

PRIORITY APPLN. INFO.: KR 2000-71497 A 20001129
OTHER SOURCE(S): MARPAT 137:88448
GI



I

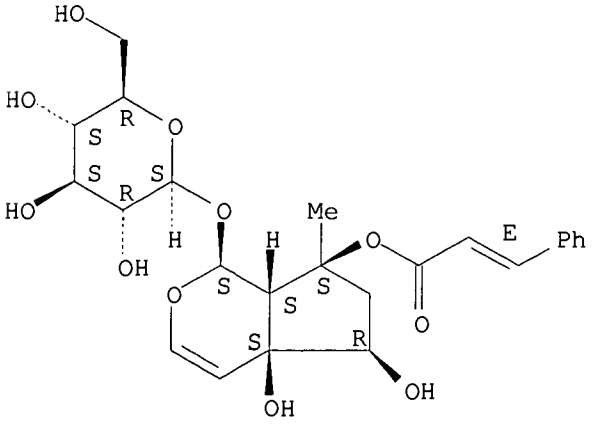
AB Harpagide-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of osteoporosis, arthritis, and/or intervertebral disk diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). Harpagide (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. harpagide or harpagoside are given.

IT **19210-12-9P**, Harpagoside
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(harpagide-related compds. for prevention and treatment of osteoporosis, arthritis, and intervertebral disk hernia)

RN 19210-12-9 CAPLUS

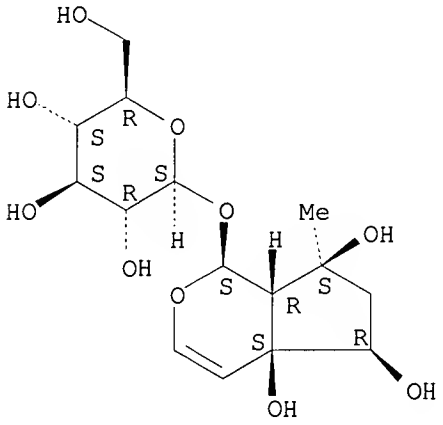
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT **6926-08-5P**, Harpagide
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(harpagide-related compds. for prevention and treatment of osteoporosis, arthritis, and intervertebral disk hernia)
RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

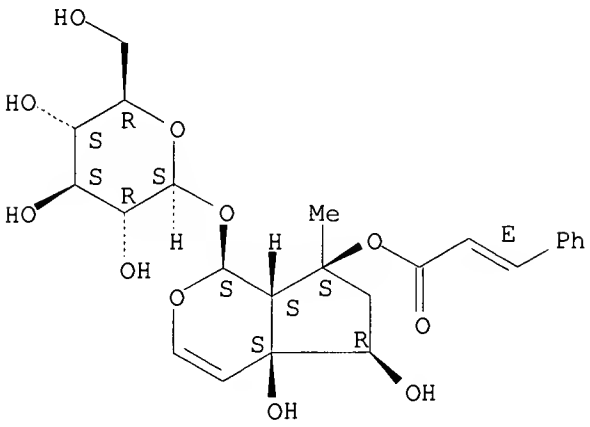


L5 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:426629 CAPLUS
DOCUMENT NUMBER: 136:406832
TITLE: Pharmaceutical **composition** with antiarteriosclerotic activity
INVENTOR(S): Greither, Otto
PATENT ASSIGNEE(S): Salus-Haus GmbH & Co. KG, Germany
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1210945	A1	20020605	EP 2001-128629	20011130

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: DE 2000-10059838 A 20001201
AB The invention pertains to a new application of exts. of devil's-claw root (Harpagophytum procumbens), esp. in combination with exts. of Salicis Cortex (willow bark), to be used in treatment of atherosclerosis. The H. procumbens ext. modulates neointima formation following denudation injury of endothelium in a femoral artery.
IT **19210-12-9**, Harpagoside
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmaceutical **compn.** with antiarteriosclerotic activity)
RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:314471 CAPLUS
DOCUMENT NUMBER: 136:305119
TITLE: Methods for identifying products employing reporter gene expression
INVENTOR(S): Weinstein, Barry; Keller, Lorraine Holowach; Palli, Subba Reddy
PATENT ASSIGNEE(S): Rohm and Haas Company, USA
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1199371	A2	20020424	EP 2001-308598	20011009
EP 1199371	A3	20020724		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001004535	A	20020604	BR 2001-4535	20011016
CN 1350062	A	20020522	CN 2001-135800	20011017

PRIORITY APPLN. INFO.: US 2000-690391 A 20001017

AB A method for identifying a product involves the steps of: (1) assocg. with the product a marker ligand; and (2) detecting the marker ligand in the product at a later point in time as a means of identifying the product by contacting the product with a detector **compn**. The detector **compn**. comprises one or more first nucleotide sequences encoding one or more natural or synthetic ligand-dependent transcription factors, wherein said factors comprise at least one ligand binding domain, at least one DNA binding domain and at least one transactivation domain; and a second nucleotide sequence encoding a reporter gene under the regulatory control of a receptor response element or a modified or synthetic response element, and a second promoter. The method may also employ a corepressor or coactivator or a nucleotide sequence encoding the corepressor or activator. Interaction between the marker ligand and ligand binding domain is highly specific and induces a change in the expression of the reporter gene, the change producing a detectable signal identifying the presence of the marker ligand in the product. The detector **compn**

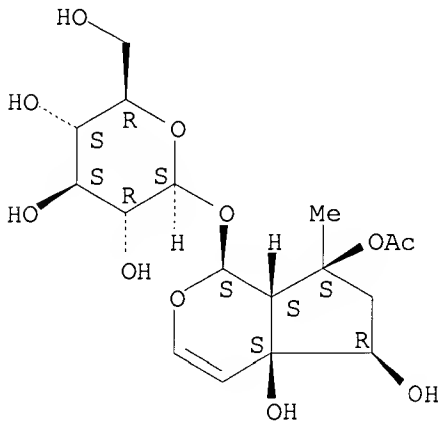
., a cell line contg. the first and second nucleotide sequences, kits using them and products marked with specific marker ligands are useful in this method.

IT **6926-14-3**, 8-O-Acetylharpagide
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods for identifying products employing reporter gene expression)

RN 6926-14-3 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-7-(acetyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:31340 CAPLUS

DOCUMENT NUMBER: 134:95502

TITLE: **Compositions** and methods for treating or preventing osteoporosis

INVENTOR(S): Prince, Richard Lewis; Min, Xu

PATENT ASSIGNEE(S): University of Western Australia, Australia; Guangzhou University of Traditional Chinese Medicine

SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001001996	A1	20010111	WO 2000-AU737	20000629
WO 2001001996	C2	20020912		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 1999-1273 A 19990629

AB The invention relates to a therapeutic **compn.** and method for treating osteoporosis and other calcium, and/or estrogen related disorders. Examples are given for treating osteoporosis with exts. of plants such as Epimedium koreanum, Slavia miltiorrhiza, Asragalus

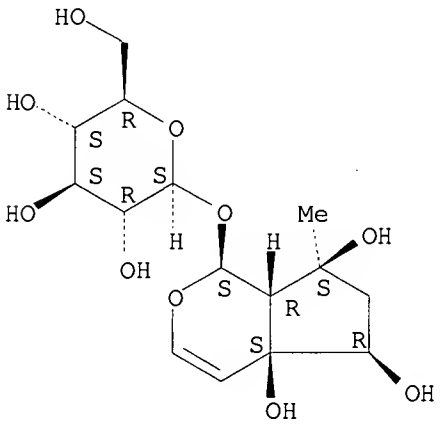
membranaceus, Pueraria thomsonii, and Psoralea coryliofolia.

IT **6926-08-5**, Harpagide
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(herb medicine exts. for treating or preventing osteoporosis)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:810592 CAPLUS

DOCUMENT NUMBER: 130:194277

TITLE: Phytoconstituents from the roots of Stachytarpheta indica

AUTHOR(S): Ganapaty, S.; Babu, G. Jaya; Naidu, K. C.

CORPORATE SOURCE: Department of Pharmaceutical Sciences, Department of Botany, Andhra University, Visakhapatnam, 530 003, India

SOURCE: Journal of Medicinal and Aromatic Plant Sciences (1998), 20(3), 697-699
CODEN: JMASF6

PUBLISHER: Central Institute of Medicinal and Aromatic Plants

DOCUMENT TYPE: Journal

LANGUAGE: English

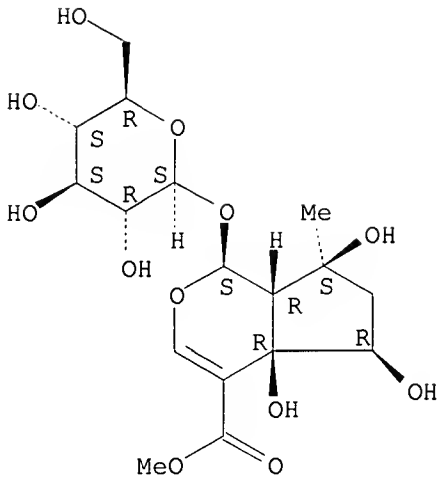
AB From the roots of Stachytarpheta indica seven compds., .beta.-sitosterol, stigmasterol, luteolin, hispidulin, scutellarein, ursolic acid, and the iridoid compd. 6.beta.-hydroxyipolamide, were isolated and characterized by spectroscopic methods.

IT **87797-84-0**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(constituents from roots of Stachytarpheta indica)

RN 87797-84-0 CAPLUS

CN Cyclopenta[c]pyran-4-carboxylic acid, 1-(.beta.-D-glucopyranosyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methyl-, methyl ester, (1S,4aR,5R,7S,7aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

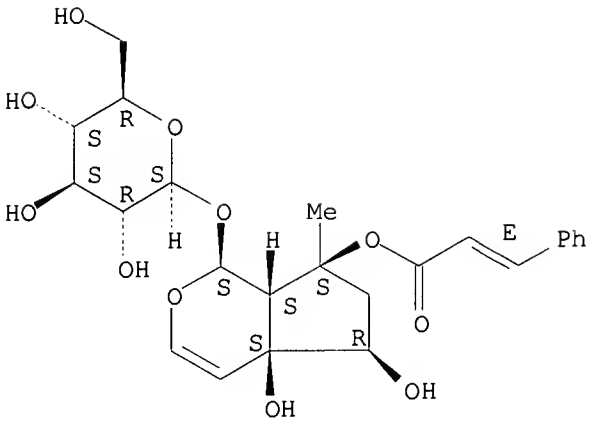
L5 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:267898 CAPLUS
DOCUMENT NUMBER: 129:38196
TITLE: Separation of nine iridoids by capillary electrophoresis and high-performance liquid chromatography
AUTHOR(S): Wu, Hsin-Kai; Chuang, Wu-Chang; Sheu, Shuenn-Jyi
CORPORATE SOURCE: Sec. 4, 88, Department of Chemistry, National Taiwan Normal University, Tingchow Road, Taipei, Taiwan
SOURCE: Journal of Chromatography, A (1998), 803(1 + 2), 179-187
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A capillary zone electrophoretic (CZE) method and a HPLC method were developed for the sepn. of the nine iridoids, gardenoside, geniposide, geniposidic acid, shanzhiside, loganin, loganic acid, aucubin, harpagoside and catalpol. Detection at 210 and 230 nm with a 2,6-di-O-methyl-.beta.-cyclodextrin and Na borate buffer as carrier or with a linear gradient elution system using MeCN and K dihydrogen phosphate soln. as eluent is the most suitable approach for this sepn. The CZE anal. time (32 min) was shorter than that of HPLC (45 min), but the CE method can sep. only eight of the nine compds. The pH, buffer concn. and org. **compn.** of the mobile phase were studied for their effects on the separability of the compds.

IT **19210-12-9**, Harpagoside
RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)
(sepn. of nine iridoids by capillary electrophoresis and high-performance liq. chromatog.)

RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L5 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:34689 CAPLUS
DOCUMENT NUMBER: 126:162242
TITLE: **Compositions** and method of treating cardio-, cerebro-vascular and Alzheimer's diseases and depression
INVENTOR(S): Tashiro, Renki; Pater, Ruth H.
PATENT ASSIGNEE(S): Tashiro, Renki, Japan; Pater, Ruth H.
SOURCE: U.S., 22 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

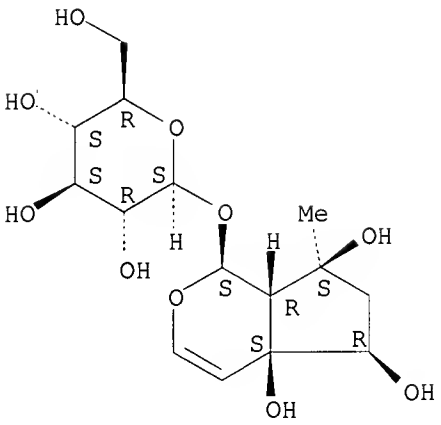
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5589182	A	19961231	US 1993-161350	19931206

AB A pharmaceutical **compn.** suitable for the treatment of a condition selected from the group consisting of cardiovascular disease, cerebrovascular disease, Alzheimer's disease, depression or combinations thereof comprising various mixts. of the aq. exts. of tissue of specific Chinese plants and herbs. A method of prepg. the pharmaceutical **compns.** of the invention and a method for treating a patient therewith are also disclosed.

IT **6926-08-5**, Harpagide
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical Chinese plant and herb **compns.** for treating cardio-, cerebro-vascular and Alzheimer's diseases and depression)

RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:222711 CAPLUS
DOCUMENT NUMBER: 124:311493
TITLE: Systematic analysis of glucoiridoids from Penstemon serrulatus Menz. by high-performance liquid chromatography with pre-column solid-phase extraction
AUTHOR(S): Bazylak, Grzegorz; Rosiak, Andrzej; Shi, Cheng-Yang
CORPORATE SOURCE: Hygienics Dep., Medical Univ. Lodz, Lodz, PL-90-251, Pol.
SOURCE: Journal of Chromatography, A (1996), 725(1), 177-87
CODEN: JCRAEY; ISSN: 0021-9673
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Samples (122) of crude ethanol-exts. of callus tissues from P. serrulatus Menz. were used to develop a solid-phase extn. (SPE) clean-up procedure using an octadecylsilica packed cartridge for removing a complex mixt. of free phenolic acids and anthocyanin-like colored substances, for the isolation of a sufficiently clean glucoiridoid fraction (GF). An addnl. SPE sample pretreatment step of the crude exts. enabled the enhancement of selectivity and sensitivity on applied HPLC for the identification and quantitation of the iridoid constituents of the GF fraction. In particular, 5 valeriana-type esterified glucoiridoids which consist of penstemide, serrulatoloside, 8-epi-valerosidate, 7-deoxy-8-epi-valerosidate and serrulatoside in prepd. GF fractions were detd. by isocratic HPLC measurements. During a single HPLC sepn., the traces of four non-esterified glucoiridoids, i.e. harpagide, aucuboside, loganine and plantarenaloside, were satisfactorily resolved and detected on the registered HPLC chromatograms of investigated GF fractions. The HPLC analyses were carried out on an octadecylsilica column (25 .times. 0.4 cm I.D.) using methanol-water (30:70, vol./vol.) as the mobile phase with a flow-rate of 2 mL/min and the absorbance was monitored at 220 nm using an UV detector. The described chromatog. assay for penstemide, which exhibits potential antitumor activity against P-388 lymphocytic leukemia cells, was applied to the monitoring and standardization of growth conditions for callus cultures of P. serrulatus. Penstemide contents ranged from 0.05 to 2.7% of the fresh wt. of the investigated callus samples. Multivariate statistical methods (principal components anal.) were applied to demonstrate the influence of a variety of **compns**. of growth media, esp. the type and concn. of synthetic growth regulators, e.g., 3-indolylacetic acid, 2,4-dichlorophenoxyacetic acid, or 1-naphthylacetic acid, on the formation of different profiles of glucoiridoids in the callus cultures of P. serrulatus. Calcd. principal component values were useful for explaining variations in the penstemide/serrulatoloside ratio in the investigated samples and for detg. the most favorable growth conditions in plants leading to optimal

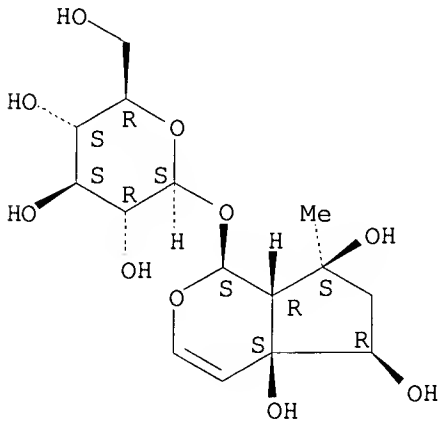
glucoiridoid biosynthesis.

IT **6926-08-5**, Harpagide
RL: ANT (Analyte); ANST (Analytical study)
(anal. of glucoiridoids of Penstemon serrulatus by HPLC with precolumn solid-phase extn.)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:892037 CAPLUS

DOCUMENT NUMBER: 123:334965

TITLE: Chemical **composition** of Scropularia nodosa L. seeds

AUTHOR(S): Grabia, B.; Kurowska, A.; Swiatek, L.

CORPORATE SOURCE: Zaklad Biologii i Botaniki Farmaceutyccznej, Akademia Medyczna, Lodz, 90-151, Pol.

SOURCE: Herba Polonica (1995), 41(2), 59-63
CODEN: HPBIA9; ISSN: 0018-0599

PUBLISHER: Instytut Roslin i Przetworow Zielarskich

DOCUMENT TYPE: Journal

LANGUAGE: Polish

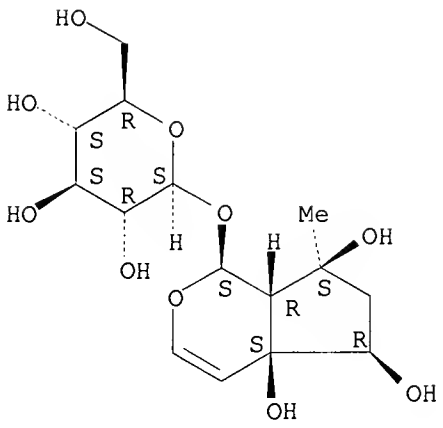
AB From the seeds of S. nodosa iridoid, phenolic acid and saccharide fractions were obtained by column chromatog. The following compds. were detected in the fractions by chromatog. methods: the iridoids harpagide, harpagoside, harpagide acetate; the phenolic acids ferulic, vanillic, p-hydroxybenzoic, caffeic, protocatechuic; and the saccharides glucose, fructose, saccharose, raffinose. An oil was isolated with yield amounting to 22%. The contents of fatty acids were detd. by gas chromatog.: palmitic acid 8.32%, stearic acid 1.5%, oleic acid 13.24%, linoleic acid 62.81% and linolenic acid 13.79%. The presence of .beta.-sitosterol was detected in the oil. A high dietetic and therapeutic value of the oil was indicated, which is due to a considerable content of linoleic acid and the presence of .beta.-sitosterol.

IT **6926-08-5**, Harpagide **6926-14-3 19210-12-9**, Harpagoside
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(**compn**. of Scropularia nodosa seeds)

RN 6926-08-5 CAPLUS

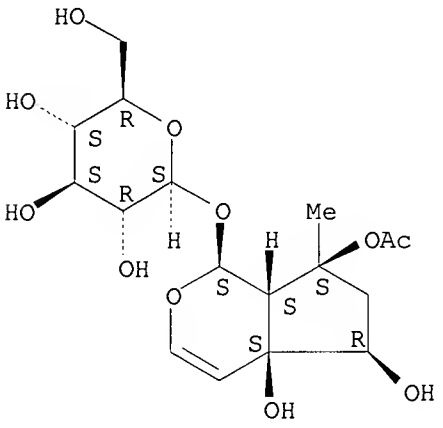
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



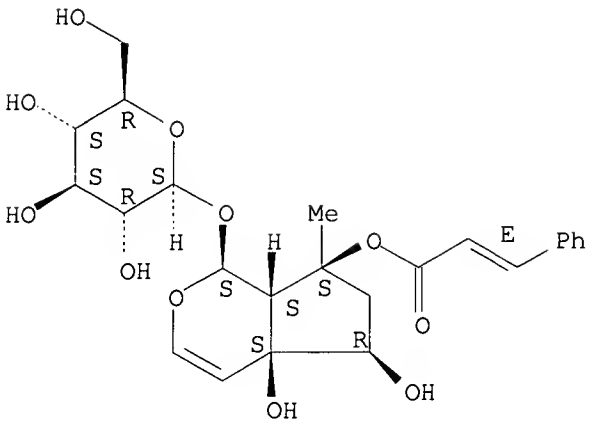
RN 6926-14-3 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-7-(acetyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

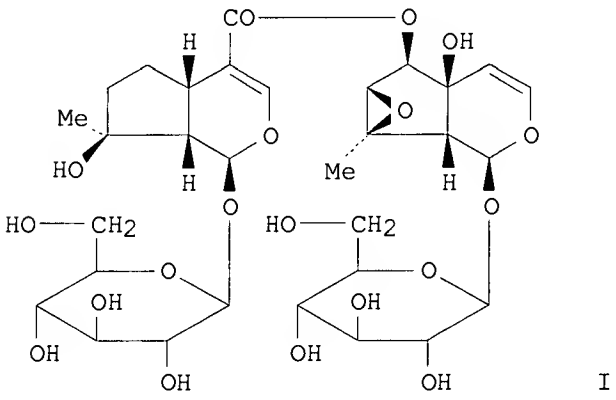


RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L5 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:711243 CAPLUS
DOCUMENT NUMBER: 123:138793
TITLE: Two iridoid glucosides, 5-O-menthiafoloylkickxioside and kickxin, from Kickxia Dum. species
AUTHOR(S): Handjieva, Nedjalka; Tersieva, Liljana; Popov, Simeon; Evstatieva, Ljuba
CORPORATE SOURCE: Cent. Phytochem., Inst. Org. Chem., Sofia, 1113, Bulg.
SOURCE: Phytochemistry (1995), 39(4), 925-7
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



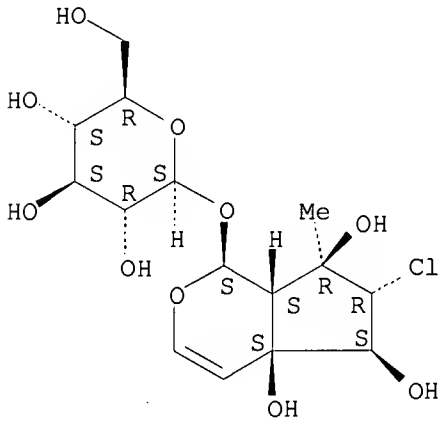
I

AB The iridoid **compns.** of Kickxia elatine, K. spuria and K. commutata were studied. Two new iridoid glucosides, 5-O-menthiafoloylkickxioside and the dimer kickxin (I), were isolated. Their structures were elucidated on the basis of spectral and chem. data. The structure of kickxin has been detd. as an ester of mussaenosidic acid and antirrhinoside between C-11 and C-6. Addnl., five known iridoid glucosides, kickxioside, antirrhinoside, linarioside, antirrhide and mussaenosidic acid, were isolated and identified. The latter two iridoids were found for the first time in Kickxia species.

IT **35927-36-7**, Linarioside
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of Kickxia species)

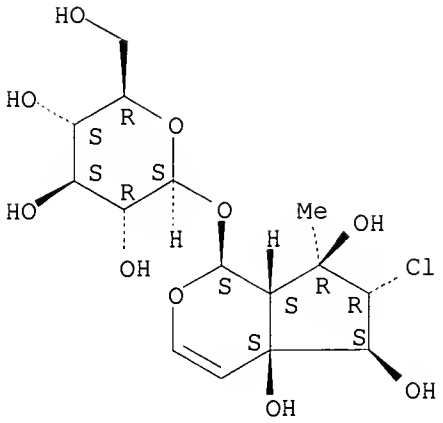
RN 35927-36-7 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5S,6R,7R,7aS)-6-chloro-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L5 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:405097 CAPLUS
DOCUMENT NUMBER: 121:5097
TITLE: Iridoid and flavonoid glycosides from Linaria species
AUTHOR(S): Ilieva, E.; Handjieva, N.; Bankova, V.; Popov, S.; Evstatieva, L.
CORPORATE SOURCE: Inst. Org. Chem., Sofia, 1113, Bulg.
SOURCE: Bulgarian Chemical Communications (1992), 25(3), 400-6
CODEN: BCHCE4; ISSN: 0324-1130
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The iridoid and flavonoid **compn.** of six Linaria species (L. vulgaris, L. genistifolia, L. dalmatica, L. pelisseriana, L. simplex and Linaria sp.) was investigated. Eleven iridoids, eight of which were new compds., and five flavonoids were isolated. The main iridoid glucoside antirrinoside was found for the first time in five of the studied species while linarioside and 5-O-glucosylantirrinoside were found in all six of them. The flavonoid glycosides pectolinarin and acetylpectolinarin, were found for the first time in L. dalmatica and Linaria sp.. The structures of six new iridoids were detd. Chemosystematic relationships of Linaria species were proposed.
IT **35927-36-7**, Linarioside
RL: PROC (Process)
(structure and isolation of, from Linaria species)
RN 35927-36-7 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5S,6R,7R,7aS)-6-chloro-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



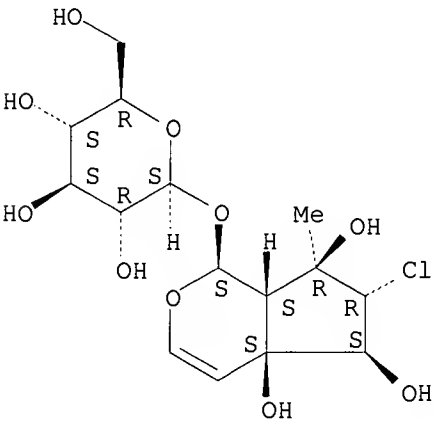
L5 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:4705 CAPLUS
DOCUMENT NUMBER: 120:4705
TITLE: Iridoid glycosides from Linaria species
AUTHOR(S): Handjieva, Nedjalka V.; Ilieva, Emilia I.; Spassov, Stefan L.; Popov, Simeon S.
CORPORATE SOURCE: Inst. Org. Chem., Sofia, 1113, UK
SOURCE: Tetrahedron (1993), 49(41), 9261-66
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English

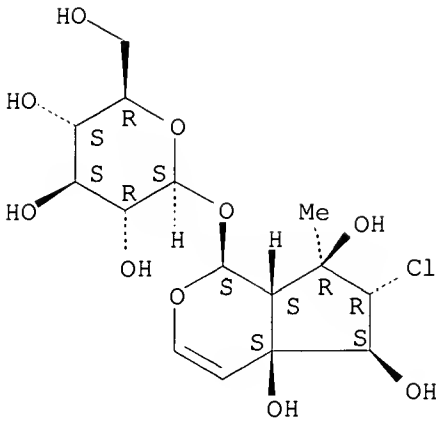
AB The iridoid **compn.** of four Linaria species has been investigated. Two new iridoids along with known compds. were isolated and identified. The new iridoid glucoside, 7,8-epi-antirrinoside, found in L. dalmatica, is the first iridoid glucoside with an .alpha.-orientation of the 7,8-epoxide ring, while 6.beta.-hydroxyantirride, found in L. genistifolia and L. peloponnesiaca, is a second representative of the rare antirride iridoid type. Antirride was found for the first time in L. simplex. Structure elucidations were carried out mainly by spectral methods and mol. mechanics calcns. Chemosystematic relationships are also discussed.

IT **35927-36-7**, Linarioside
RL: BIOL (Biological study)
(from Linaria species)

RN 35927-36-7 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5S,6R,7R,7aS)-6-chloro-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).





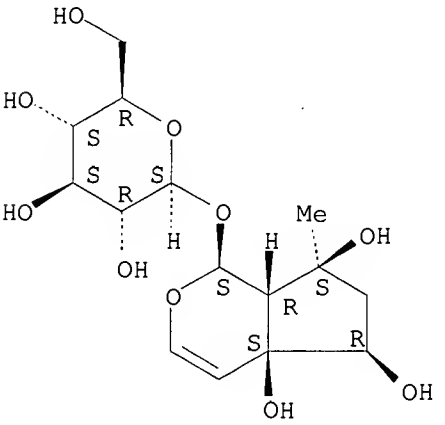
L5 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:479940 CAPLUS
DOCUMENT NUMBER: 119:79940
TITLE: Study on the traditional pharmacopeia of Tunisia: Study on the aerial parts of Ajuga iva (L.) Schreb
AUTHOR(S): Ghedira, K.; Chemli, R.; Richard, B.; Zeches, M.; Le Men-Olivier, L.
CORPORATE SOURCE: Lab. Pharmacogn., Fac. Pharm., Monastir, 5000, Tunisia
SOURCE: Plantes Medicinales et Phytotherapie (1991), 25(2-3), 100-11
CODEN: PLMPA9; ISSN: 0032-0994
DOCUMENT TYPE: Journal
LANGUAGE: French

AB Four vouchers of fresh and dried aerial parts of A. iva were studied. Seven known compds. were isolated: cyasterone, makisterone A, ecdysterone, harpagide, 8-O-acetyl harpagide and 2 flavonoids: naringin and apigenin-7-O-neohesperidoside. The 2 latter compds., isolated from the fresh drug, are isolated for the first time in Ajuga genus. This study completes the previous NMR data.

IT **6926-08-5**, Harpagide **6926-14-3**, 8-O-Acetylharpagide
RL: BIOL (Biological study)
(of Ajuga iva aerial parts)

RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

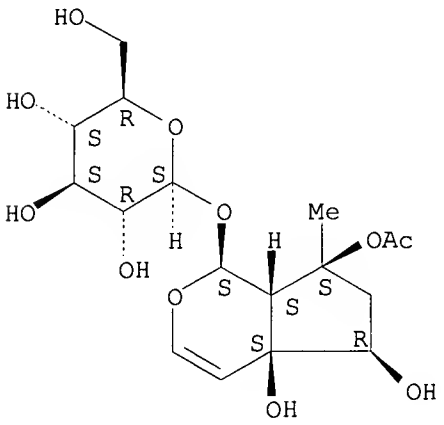
Absolute stereochemistry.



RN 6926-14-3 CAPLUS

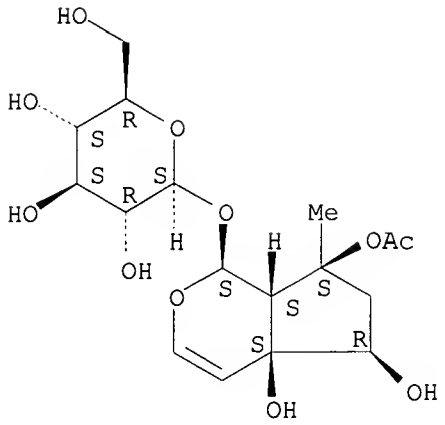
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-7-(acetyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



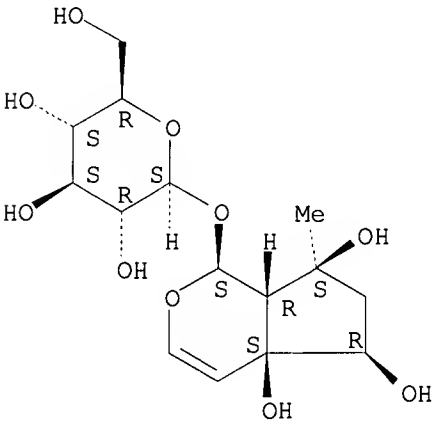
L5 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:567707 CAPLUS
DOCUMENT NUMBER: 117:167707
TITLE: Distribution of the iridoid compounds in the Hamamelidae
AUTHOR(S): Jiang, Zhihong; Zhou, Ronghan
CORPORATE SOURCE: Div. Plant Chemotaxon., China Pharm. Univ., Nanjing, Peop. Rep. China
SOURCE: Zhongguo Yaoke Daxue Xuebao (1992), 23(3), 140-3
CODEN: ZHYXE9; ISSN: 1000-5048
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB In the present paper, distribution of the iridoid compds. in the Hamamelida (A., Cronquist, 1981) was summarized on the basis of refs. and exptl. studies. It was found that Altingia and Semiliquidambar (Hamamelidaceae) contain iridoid compds. The systematic positions of the Hamamelidaceae, Daphniphyllaceae, and Eucommiaceae were discussed according to the iridoid distribution from the view points of chemosystematics.
IT **6926-14-3**
RL: BIOL (Biological study)
(in Eucommia plant)
RN 6926-14-3 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-7-(acetyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1984:626921 CAPLUS
DOCUMENT NUMBER: 101:226921
TITLE: Iridoid and phenylpropanoid glycosides from new sources
AUTHOR(S): Bianco, A.; Guiso, M.; Passacantilli, P.
CORPORATE SOURCE: Dip. Chim., Univ. Roma "La Sapienza", Rome, 00185, Italy
SOURCE: J. Nat. Prod. (1984), 47(5), 901-2
CODEN: JNPRDF; ISSN: 0163-3864
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A survey of plants typical of the indigenous flora of Italy showed the presence of 6-O-.beta.-glucosylaucubin in Verbascum sinuatum, catalpol, harpagide, ajugol, and aucubin in V. thapsus, loganic acid in Vinca minor and V. major, asperuloside in Plantago major and P. lanceolata, and verbascoside and eukovoside in Verbena officinalis.
IT **6926-08-5**
RL: BIOL (Biological study)
(from Verbascum thapsus)
RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



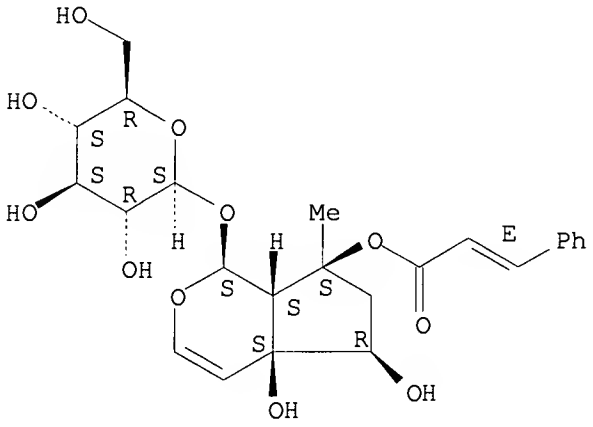
L5 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:436117 CAPLUS

DOCUMENT NUMBER: 97:36117
TITLE: Studies on Harpagophytum. 4. Content of free sugars and harpagoside in callus cultures and genuine root tissues of Harpagophytum procumbens
AUTHOR(S): Franz, G.; Czygan, F. C.; Abou-Mandour, Ahmed A.
CORPORATE SOURCE: Univ. Regensburg, Regensburg, 8400, Fed. Rep. Ger.
SOURCE: Planta Med. (1982), 44(4), 218-20
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: German

AB Comparison of anal. results of the constituents of naturally growing roots and callus of H. procumbens demonstrated that both the products of primary and secondary metab. showed important differences. Harpagoside, which is present in significant amts. in the roots and tubers of the fresh plants, was completely absent in the callus. Stachyose, the main reserve carbohydrate, was only produced in minor amts. in callus. Fructose was the predominant sugar in the callus cells.

IT **19210-12-9**
RL: BIOL (Biological study)
(of Harpagophytum procumbens roots and callus tissues)
RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L5 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1981:12764 CAPLUS
DOCUMENT NUMBER: 94:12764
TITLE: Preliminary chemotaxonomic evaluation of Caucasian species of the genus Stachys
AUTHOR(S): Pakaln, D. A.; Komissarenko, N. F.; Sheremet, I. P.; Derkach, A. I.
CORPORATE SOURCE: Ukr. Opytn. Stants., Vses. Nauchno-Issled. Inst. Lek. Rast., Poltava, USSR
SOURCE: Polezn. Rast. Prir. Flory Ispol'z. Ikh Nar. Khoz. (1980), 82-5. Editor(s): Sikura, I. I. Izd. Naukova Dumka: Kiev, USSR.
CODEN: 44NIAZ
DOCUMENT TYPE: Conference
LANGUAGE: Russian

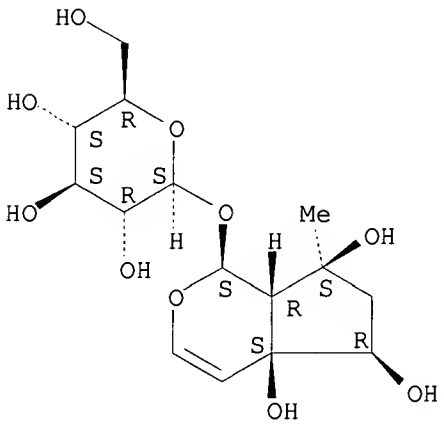
AB Most of 20 Stachys species investigated contained flavonoid glycosides, the aglycon part of which consisted of scutellarin, 7-methoxyscutellarin, 4'-methoxyscutellarein, and 4'-methoxyisoscutellarein; the sugar component

of the glycosides consisted of D-glucose and D-mannose coupled by a 1,2-glycosidic bond. With regard to some aspects of the flavonoid structure (substituents in ring A), the Stachys species were close to Scutellaria species, but the genera differed with regard to the sugar component of the glycosides (that of the latter species consisting mainly of D-glucuronic acid). Some flavonoids were characteristic for most species whereas others were more species-specific within Stachys. Iridoid compds. were valuable for solving chemotaxonomic problems of Stachys. The typical iridoid compds. found in Stachys were: harpagide, harpagide acetate, reptoside, and diacetyl reptoside. The iridoid **compn.** was indicative of the heterogeneity of Stachys. Some Stachys species are grouped with regard to iridoid **compn.**

IT **6926-08-5 75880-30-7**
RL: BIOL (Biological study)
(in Stachys species, taxonomy in relation to)

RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

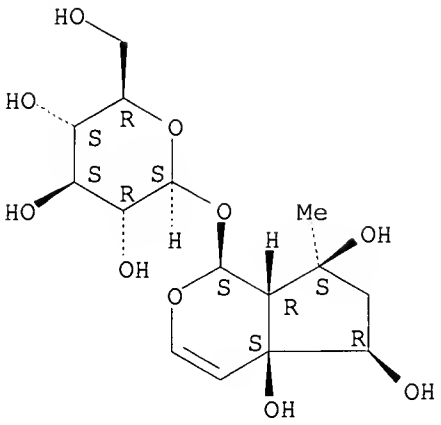


RN 75880-30-7 CAPLUS
CN .beta.-D-Glucopyranoside, 1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl, monoacetate, [1S-(1.alpha.,4a.alpha.,5.alpha.,7.alpha.,7a.alpha.)]- (9CI) (CA INDEX NAME)

CM 1

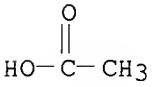
CRN 6926-08-5
CMF C15 H24 O10

Absolute stereochemistry.



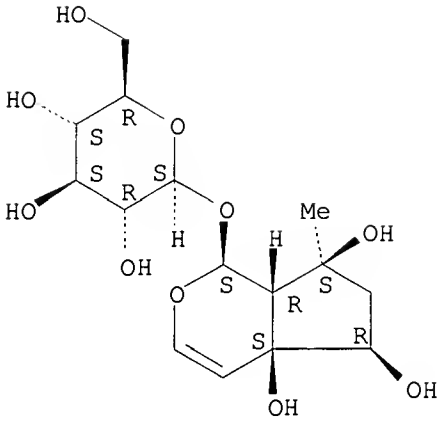
CM 2

CRN 64-19-7
CMF C2 H4 O2



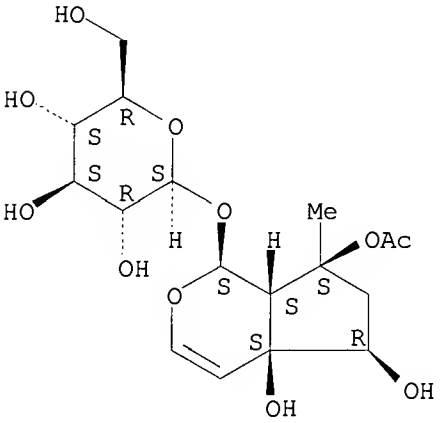
L5 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:452707 CAPLUS
DOCUMENT NUMBER: 91:52707
TITLE: Iridoids of Stachys inflata and Stachys iberica
AUTHOR(S): Komissarenko, N. F.; Derkach, A. I.; Sheremet, I. P.; Pakaln, D. A.
CORPORATE SOURCE: Khar'k. Nauchno-Issled. Khim.-Farm. Inst., Kharkov, USSR
SOURCE: Khim. Prir. Soedin. (1979), (1), 99-100
CODEN: KPSUAR; ISSN: 0023-1150
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The aerial parts of varieties of hedge nettle (S. inflata and S. iberica) were shown to contain .gtoreq.4 iridoid compds. Both varieties contained ajugol and ajugoside (8-O-acetylajugol) and S. iberica contained in addn. harpagide and harpagide acetate. Acetylation of ajugol at 18-20.degree. led to the formation of its pentaacetate deriv.; acetylation at 50.degree. led to the hexaacetate.
IT **6926-08-5 6926-14-3**
RL: BIOL (Biological study)
(in Stachys iberica)
RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6926-14-3 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-7-(acetyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

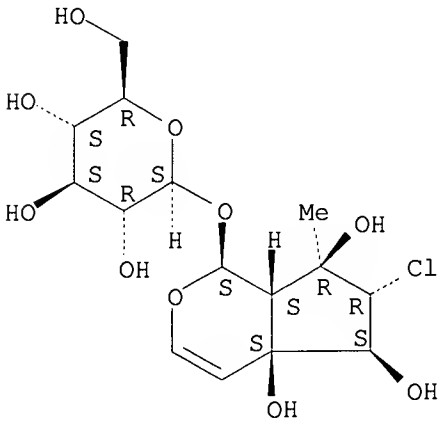
Absolute stereochemistry.



L5 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1978:456437 CAPLUS
DOCUMENT NUMBER: 89:56437
TITLE: Chemical analysis of Kickxia elatine (L.) Dum
AUTHOR(S): Toth, Laszlo; Csordas, Iren; Papay, Valeria
CORPORATE SOURCE: Inst. Med. Plant Drug Sci., Med. Szeged Univ., Szeged, Hung.
SOURCE: Herba Hung. (1978), 17(1), 35-7
CODEN: HEHUAW; ISSN: 0018-0580
DOCUMENT TYPE: Journal
LANGUAGE: Hungarian
AB A dried and ground total plant of K. elatine (Scrophulariaceae) was processed. The basic ext. made with MeOH and 80% MeOH was shaken with petroleum ether, dichloromethane, EtOAc, and BuOH. The EtOAc and BuOH fractions, the aq. residue, and the ppt. sepd. from the basic ext. were processed by column chromatog. In the course of anal. 4 flavonoids, 5 iridoids (among them antirrhinoside and linarioside), sucrose, glucose, D-mannitol, and myoinositol were isolated.
IT **35927-36-7**
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(of Kickxia elatine)

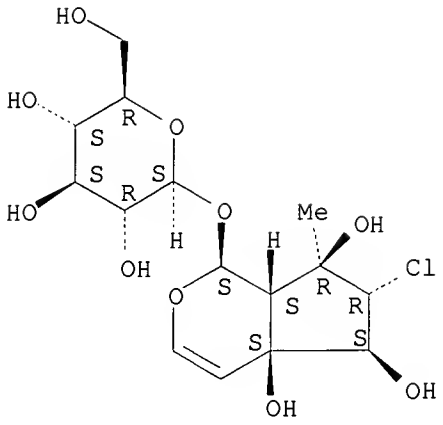
RN 35927-36-7 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5S,6R,7R,7aS)-6-chloro-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

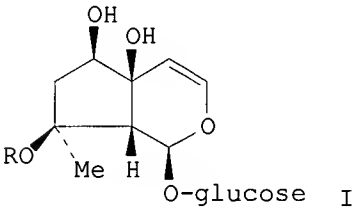


L5 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1978:439373 CAPLUS
DOCUMENT NUMBER: 89:39373
TITLE: Constituents of Kickxia spuria (L.) Dum
AUTHOR(S): Toth, L.; Kokovay, K.; Bujtas, Gy.; Papay, V.
CORPORATE SOURCE: Pharmacogn. Inst., Med. Univ. Szeged, Szeged, Hung.
SOURCE: Pharmazie (1978), 33(1), 84
CODEN: PHARAT; ISSN: 0031-7144
DOCUMENT TYPE: Journal
LANGUAGE: German
AB A flavone, 5,6,7-trimethoxyflavone, identical with the flavone from Zeyhera turberculosa and K. lanigera, was isolated from the CHCl3 ext. of the K. sporia MeOH and MeOH/H2O exts. From the Et acetate fraction of the MeOH/H2O ext., 5,7-dihydroxy-6,4'-dimethoxyflavone 7-O-rhamnoglucoside (pectolinarin) was isolated and the residue of the MeOH/H2O ext. yielded antirrhinoside, linarioside, mannitol, glucose, and myo-inositol.
IT **35927-36-7**
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(of Kickxia spuria)
RN 35927-36-7 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5S,6R,7R,7aS)-6-chloro-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L5 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:606413 CAPLUS
DOCUMENT NUMBER: 87:206413
TITLE: Pharmaceutical-biological studies of the genus Harpagophytum (Bruch.) DC ex Meissen. Part 1. Phytochemical standardization of Tubera Harpagophyti
AUTHOR(S): Czygan, Franz Christian; Krueger, Almuth; Schier, Walter; Volk, Otto Heinrich
CORPORATE SOURCE: Inst. Bot. Pharm. Biol., Univ. Wuerzburg, Wuerzburg, Ger.
SOURCE: Dtsch. Apoth.-Ztg. (1977), 117(36), 1431-4
CODEN: DAZEA2
DOCUMENT TYPE: Journal
LANGUAGE: German
GI



I

AB Exts. of 60 H. procumbens root samples were analyzed and the min. values for a std. drug prepn. were established as following: harpagoside (I) (where R = trans-cinnamoyl) [**19210-12-9**] 0.5% (calcd. for the dry material), bitter principle 6000, and ext. content 50% (calcd. for the dry substance). The drug was extd. from the dried roots by MeOH, and sepd. by thin-layer chromatog. with a 3:1 CHCl3:MeOH solvent mixt. I was identified as a gray halo under fluorescence light, and as a blue-gray spot when treated with dimethylaminobenzaldehyde. Quant. results were obtained by spectrometry.

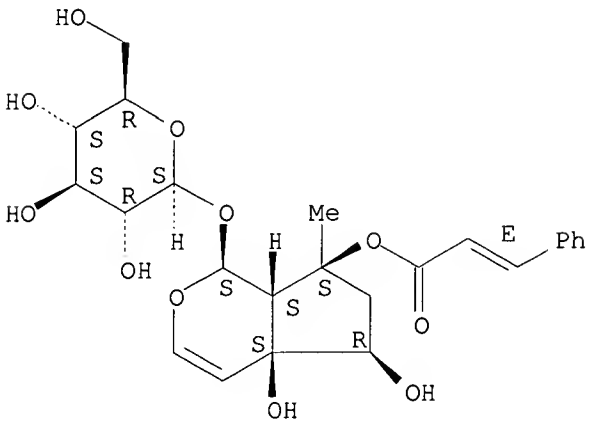
IT **19210-12-9**
RL: BIOL (Biological study)
(of Harpagophytum root exts., stds. for)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



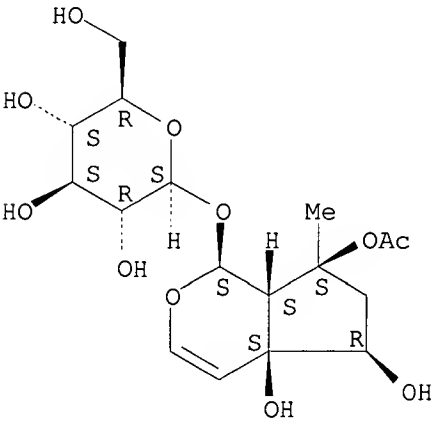
L5 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:580763 CAPLUS
DOCUMENT NUMBER: 87:180763
TITLE: Chemical **composition** of Scrophularia vernalis
AUTHOR(S): Swiatek, Lucjan; Krzaczek, Tadeusz
CORPORATE SOURCE: Inst. Environ. Stud. Bioanal., Sch. Med., Lodz, Pol.
SOURCE: Acta Pol. Pharm. (1976), 33(5), 653-8
CODEN: APPHAX
DOCUMENT TYPE: Journal
LANGUAGE: Polish

AB Aucuboside and a mixt. of 2 flavonoids were isolated from S. vernalis herb and roots. Chromatog. detected harpagide 8-acetate, 6-methylcatalpol, harpagoside, p-hydroxybenzoic, vanillic, p-coumaric, p-methoxycinnamic, caffeic, ferulic, isoferulic, and p-hydroxyphenylacetic acids, glucose, fructose, sucrose, raffinose, and stachyose.

IT **6926-14-3 19210-12-9**
RL: BIOL (Biological study)
(from Scrophularia vernalis)

RN 6926-14-3 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-7-(acetyloxy)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

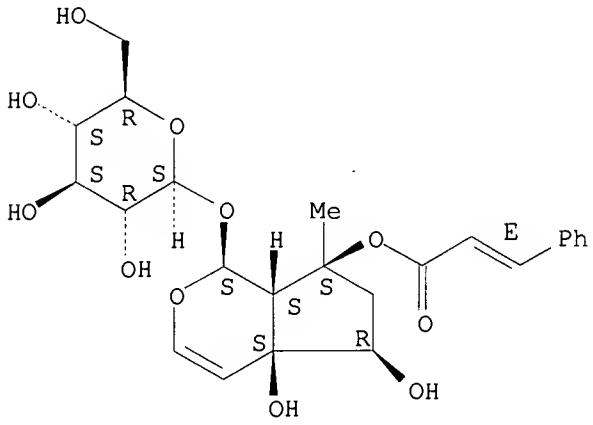
Absolute stereochemistry.



RN 19210-12-9 CAPLUS

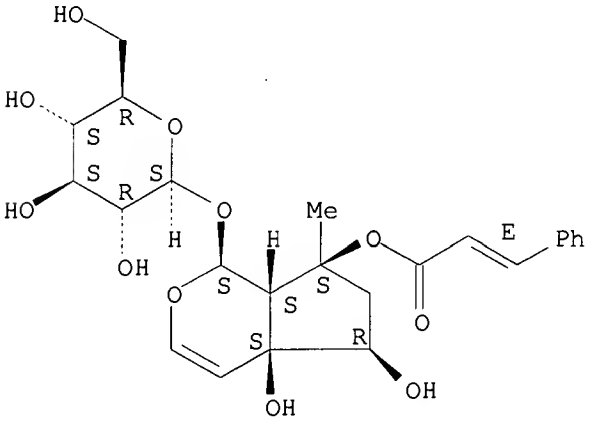
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

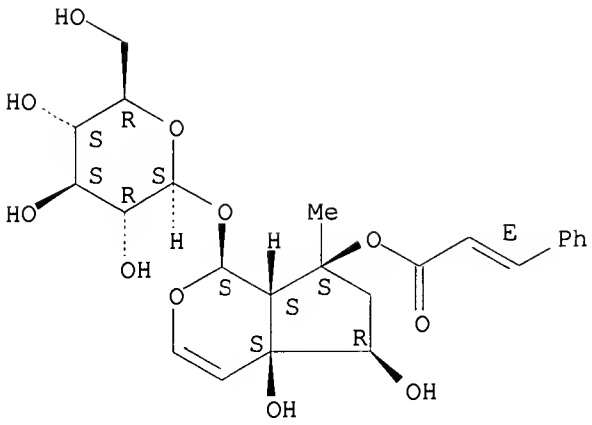
Absolute stereochemistry.
Double bond geometry as shown.



L5 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:541159 CAPLUS
DOCUMENT NUMBER: 87:141159
TITLE: The important drug: Harpagophytum procumbens
AUTHOR(S): Sticher, Otto
CORPORATE SOURCE: Pharm. Inst., ETH, Zurich, Switz.
SOURCE: Dtsch. Apoth.-Ztg. (1977), 117(32), 1279-84
CODEN: DAZEA2
DOCUMENT TYPE: Journal; General Review
LANGUAGE: German
AB The constituents and pharmacol. activity of the H. procumbens plant, the crude drug extd. from its roots, and the detn. of harpagoside [**19210-12-9**] are reviewed with 39 refs.
IT **19210-12-9**
RL: ANT (Analyte); ANST (Analytical study)
(detn. of)
RN 19210-12-9 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.




HO
HO
HO
OH
R
S
S
S
R
S
O
O
H
H
Me
O
E
Ph
O
S
S
S
O
S
R
OH
OH

```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:ssspta1623kxg

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *  Welcome to STN International  * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Apr 08  "Ask CAS" for self-help around the clock
 NEWS  3  Apr 09  BEILSTEIN: Reload and Implementation of a New Subject Area
 NEWS  4  Apr 09  ZDB will be removed from STN
 NEWS  5  Apr 19  US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
 NEWS  6  Apr 22  Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
 NEWS  7  Apr 22  BIOSIS Gene Names now available in TOXCENTER
 NEWS  8  Apr 22  Federal Research in Progress (FEDRIP) now available
 NEWS  9  Jun 03  New e-mail delivery for search results now available
 NEWS 10  Jun 10  MEDLINE Reload
 NEWS 11  Jun 10  PCTFULL has been reloaded
 NEWS 12  Jul 02  FOREGE no longer contains STANDARDS file segment
 NEWS 13  Jul 22  USAN to be reloaded July 28, 2002;
                  saved answer sets no longer valid
 NEWS 14  Jul 29  Enhanced polymer searching in REGISTRY
 NEWS 15  Jul 30  NETFIRST to be removed from STN
 NEWS 16  Aug 08  CANCERLIT reload
 NEWS 17  Aug 08  PHARMAMarketLetter(PHARMAML) - new on STN
 NEWS 18  Aug 08  NTIS has been reloaded and enhanced
 NEWS 19  Aug 19  Aquatic Toxicity Information Retrieval (AQUIRE)
                  now available on STN
 NEWS 20  Aug 19  IFIPAT, IFICDB, and IFIUDB have been reloaded
 NEWS 21  Aug 19  The MEDLINE file segment of TOXCENTER has been reloaded
 NEWS 22  Aug 26  Sequence searching in REGISTRY enhanced
 NEWS 23  Sep 03  JAPIO has been reloaded and enhanced
 NEWS 24  Sep 16  Experimental properties added to the REGISTRY file
 NEWS 25  Sep 16  Indexing added to some pre-1967 records in CA/CAPLUS
 NEWS 26  Sep 16  CA Section Thesaurus available in CAPLUS and CA
 NEWS 27  Oct 01  CASREACT Enriched with Reactions from 1907 to 1985

 NEWS EXPRESS  February 1 CURRENT WINDOWS VERSION IS V6.0d,
               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *
```

FILE 'HOME' ENTERED AT 20:53:56 ON 10 OCT 2002

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 20:54:07 ON 10 OCT 2002

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 OCT 2002 HIGHEST RN 460312-12-3
DICTIONARY FILE UPDATES: 9 OCT 2002 HIGHEST RN 460312-12-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

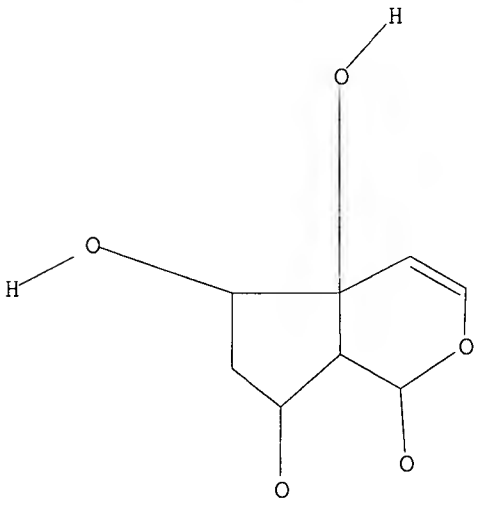
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 09995691-2.str

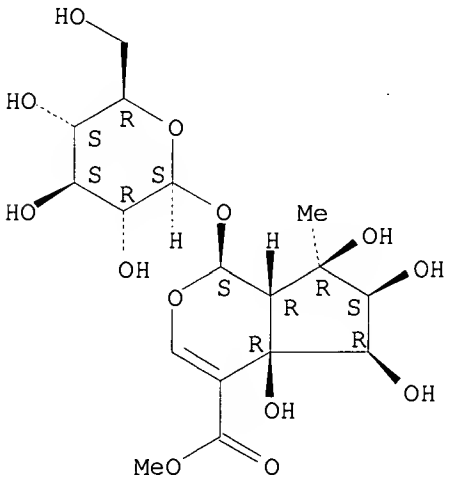
L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s l1 sam
SAMPLE SEARCH INITIATED 20:54:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   2725 TO ITERATE

 36.7% PROCESSED    1000 ITERATIONS                                  1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        51370 TO    57630
PROJECTED ANSWERS:               1 TO      153

L2            1 SEA SSS SAM L1

=> d scan

L2   1 ANSWERS   REGISTRY  COPYRIGHT 2002 ACS
IN   Cyclopenta[c]pyran-4-carboxylic acid, 1-(.beta.-D-glucopyranosyloxy)-
     1,4a,5,6,7,7a-hexahydro-4a,5,6,7-tetrahydroxy-7-methyl-, methyl ester,
     (1S,4aR,5R,6S,7R,7aR)- (9CI)
MF   C17 H26 O13

Absolute stereochemistry.  Rotation (-).
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


ALL ANSWERS HAVE BEEN SCANNED


=> s l1 sss full
FULL SEARCH INITIATED 20:55:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  57148 TO ITERATE

100.0% PROCESSED   57148 ITERATIONS                              104 ANSWERS
SEARCH TIME: 00.00.01

L3          104 SEA SSS FUL L1
```

```
=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                       140.66     140.87

FILE 'CAPLUS' ENTERED AT 20:55:17 ON 10 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1907 - 10 Oct 2002  VOL 137 ISS 15
FILE LAST UPDATED: 9 Oct 2002  (20021009/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> s l3
L4          275 L3

=> s l4 and osteoporosis
          10645 OSTEOPOROSIS
L5            3 L4 AND OSTEOPOROSIS

=> dis l5 1-3 ibib abs hitstr

L5   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2002:591953  CAPLUS
DOCUMENT NUMBER:          137:159305
TITLE:                    2-O-(9Z,12Z-octadecadienoyl)-3-O-[.alpha.-D-
                          galactopyranosyl-(1''-6')-O-.beta.-D-
                          galactopyranosyl]glycerol and pharmaceutical
                          formulations containing it
INVENTOR(S):              Shin, Jun Shik; Kim, Sang Tae; Hahn, Yong Nam
PATENT ASSIGNEE(S):       Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 30 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     JP 2002220400      A2   20020809       JP 2001-365399    20011129
PRIORITY APPLN. INFO.:                   KR 2000-71438    A  20001129
AB   Pharmaceutical formulations for treatment of osteoporosis,
     arthritis, or intervertebral disk hernia, contain 2-O-(9Z,12Z-
     octadecadienoyl)-3-O-[.alpha.-D-galactopyranosyl-(1''-6')-O-.beta.-D-
```

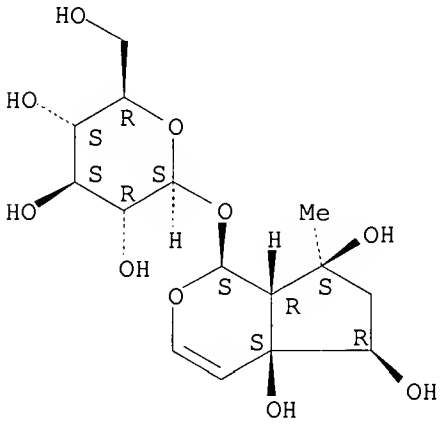
galactopyranosyl]glycerol (I) or its esters as active ingredients. I (420 mg) was purified from an EtOH ext. of 1848 g Cibotium barometz root powder. Administration of I at 75 .mu.g/mL p.o. for 2 wk prevented mouse paw edema induced by Zymosan A and Freund's adjuvant. Formulation examples of injections, tablets, capsules, and liqs. contg. I or I acetate are given.

IT **6926-08-5**, Harpagide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceuticals contg. octadecadienoyl(galactopyranosylgalactopyranosyl)glycerol for treatment of **osteoporosis**, arthritis, and intervertebral disk hernia)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

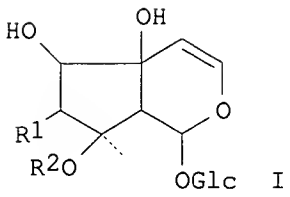
Absolute stereochemistry.



L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:533182 CAPLUS
DOCUMENT NUMBER: 137:88448
TITLE: Use of harpagide-related compounds for prevention and treatment of **osteoporosis**, arthritis, and intervertebral disk hernia, pharmaceutical compositions, and preparation of the compounds
INVENTOR(S): Shin, Jun Sik; Kim, Sang-Tae; Hahn, Yong-Nam
PATENT ASSIGNEE(S): S. Korea
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201136	A2	20020716	JP 2001-365400	20011129

PRIORITY APPLN. INFO.: KR 2000-71497 A 20001129
OTHER SOURCE(S): MARPAT 137:88448
GI



I

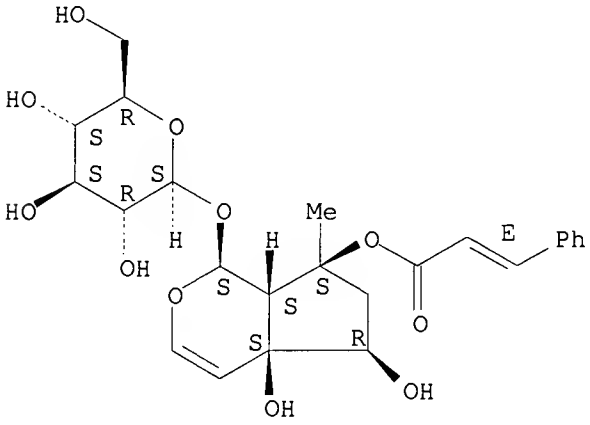
AB Harpagide-related compds. I (R1 = H, lower alkyl; R2 = H, cinnamoyl) are used for treatment or prevention of **osteoporosis**, arthritis, and/or intervertebral disk diseases. I (R1 = H, lower alkyl; R2 = cinnamoyl) are hydrolyzed to give I (R1 = H, lower alkyl; R2 = H). Harpagide (purified from Harpagophytum procumbens root) (at 75 .mu.g/kg/day p.o.) inhibited zymosan A- and Freund's adjuvant-induced rat paw edema. Formulation examples of injections, tablets, capsules, and liqs. contg. harpagide or harpagoside are given.

IT **19210-12-9P**, Harpagoside
RL: PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(harpagide-related compds. for prevention and treatment of **osteoporosis**, arthritis, and intervertebral disk hernia)

RN 19210-12-9 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aS)-1,4a,5,6,7,7a-hexahydro-4a,5-dihydroxy-7-methyl-7-[[(2E)-1-oxo-3-phenyl-2-propenyl]oxy]cyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

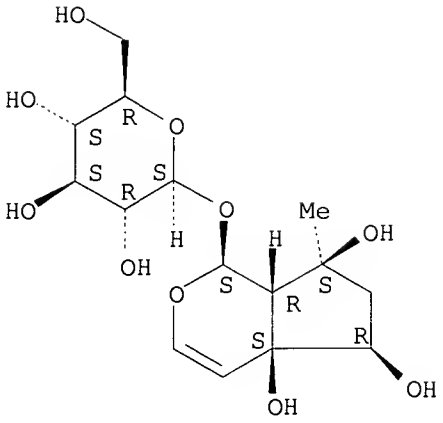


IT **6926-08-5P**, Harpagide
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(harpagide-related compds. for prevention and treatment of **osteoporosis**, arthritis, and intervertebral disk hernia)

RN 6926-08-5 CAPLUS

CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:31340 CAPLUS
DOCUMENT NUMBER: 134:95502
TITLE: Compositions and methods for treating or preventing **osteoporosis**
INVENTOR(S): Prince, Richard Lewis; Min, Xu
PATENT ASSIGNEE(S): University of Western Australia, Australia; Guangzhou University of Traditional Chinese Medicine
SOURCE: PCT Int. Appl., 93 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001001996	A1	20010111	WO 2000-AU737	20000629
WO 2001001996	C2	20020912		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

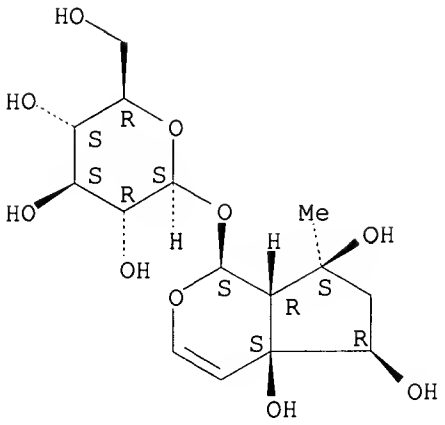
PRIORITY APPLN. INFO.: AU 1999-1273 A 19990629

AB The invention relates to a therapeutic compn. and method for treating **osteoporosis** and other calcium, and/or estrogen related disorders. Examples are given for treating **osteoporosis** with exts. of plants such as Epimedium koreanum, Slavia miltiorrhiza, Asragalus membranaceus, Pueraria thomsonii, and Psoralea coryliofolia.

IT **6926-08-5**, Harpagide
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(herb medicine exts. for treating or preventing **osteoporosis**)

RN 6926-08-5 CAPLUS
CN .beta.-D-Glucopyranoside, (1S,4aS,5R,7S,7aR)-1,4a,5,6,7,7a-hexahydro-4a,5,7-trihydroxy-7-methylcyclopenta[c]pyran-1-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s l4 and disc
         11019 DISC
          2593 DISCS
         13319 DISC
                 (DISC OR DISCS)
L6           0 L4 AND DISC

=> s l4 and ruptured
          4227 RUPTURED
L7           0 L4 AND RUPTURED

=> file medline
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    20.43     161.30

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -1.86      -1.86

FILE 'MEDLINE' ENTERED AT 20:58:49 ON 10 OCT 2002

 FILE LAST UPDATED: 10 OCT 2002 (20021010/UP).  FILE COVERS 1958 TO DATE.

 On June 9, 2002, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2002 vocabulary.  Enter HELP THESAURUS for details.

 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.

=> s l3
L8          21 L3

=> s l8 and osteoporosis
         25928 OSTEOPOROSIS
L9           0 L8 AND OSTEOPOROSIS

=> s l8 and disc
         30576 DISC
          7278 DISCS
         34977 DISC
```

(DISC OR DISCS)
L10 0 L8 AND DISC

=> file chemistry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.60	164.90

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.86

FILE 'AGRICOLA' ENTERED AT 21:00:54 ON 10 OCT 2002

FILE 'ALUMINIUM' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'ANABSTR' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 THE ROYAL SOCIETY OF CHEMISTRY (RSC)

FILE 'AQUIRE' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 US Environmental Protection Agency (EPA)

FILE 'BABS' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften
licensed to Beilstein Chemiedaten & Software GmbH and MDL Information Systems GmbH

FILE 'BIOCOMMERCE' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 BioCommerce Data Ltd. Richmond Surrey, United Kingdom. All
rights reserved

FILE 'BIOTECHNO' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CABA' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 CAB INTERNATIONAL (CABI)

FILE 'CAOLD' ENTERED AT 21:00:54 ON 10 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 21:00:54 ON 10 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CBNB' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 ELSEVIER ENGINEERING INFORMATION, INC.

FILE 'CEABA-VTB' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 DECHEMA eV

FILE 'CEN' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 American Chemical Society (ACS)

FILE 'CERAB' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'CIN' ENTERED AT 21:00:54 ON 10 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

FILE 'COMPENDEX' ENTERED AT 21:00:54 ON 10 OCT 2002
Compendex Compilation and Indexing (C) 2002
Elsevier Engineering Information Inc (EEI). All rights reserved.
Compendex (R) is a registered Trademark of Elsevier Engineering Information Inc.

FILE 'CONFSCI' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'COPPERLIT' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Copper Development Association Inc. (CDA)

FILE 'CORROSION' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'DKILIT' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 FIZ Karlsruhe

FILE 'ENCOMPLIT' ENTERED AT 21:00:54 ON 10 OCT 2002
EnComplit compilation and indexing (C) 2002
Elsevier Engineering Information Inc. All rights reserved.

FILE 'ENCOMPLIT2' ENTERED AT 21:00:54 ON 10 OCT 2002
EnComplit2 compilation and indexing (C) 2002
Elsevier Engineering Information Inc. All rights reserved.

FILE 'FEDRIP' ENTERED AT 21:00:54 ON 10 OCT 2002

FILE 'GENBANK' ENTERED AT 21:00:54 ON 10 OCT 2002

FILE 'INSPEC' ENTERED AT 21:00:54 ON 10 OCT 2002
Compiled and produced by the IEE in association with FIZ KARLSRUHE
COPYRIGHT 2002 (c) INSTITUTION OF ELECTRICAL ENGINEERS (IEE)

FILE 'INSPHYS' ENTERED AT 21:00:54 ON 10 OCT 2002
Compiled and produced by the IEE in association with FIZ KARLSRUHE
COPYRIGHT 2002 (c) INSTITUTION OF ELECTRICAL ENGINEERS (IEE)

FILE 'INVESTEXT' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Thomson Financial Services, Inc. (TFS)

FILE 'IPA' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 American Society of Hospital Pharmacists (ASHP)

FILE 'JICST-EPLUS' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Japan Science and Technology Corporation (JST)

FILE 'KOSMET' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 International Federation of the Societies of Cosmetics Chemists

FILE 'METADEX' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'NAPRALERT' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Board of Trustees of the University of Illinois,
University of Illinois at Chicago.

FILE 'NIOSHTIC' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 U.S. Secretary of Commerce on Behalf of the U.S. Government

FILE 'NTIS' ENTERED AT 21:00:54 ON 10 OCT 2002
Compiled and distributed by the NTIS, U.S. Department of Commerce.
It contains copyrighted material.
All rights reserved. (2002)

FILE 'PAPERCHEM2' ENTERED AT 21:00:54 ON 10 OCT 2002
Paperchem2 compilation and indexing (C) 2002
Elsevier Engineering Information Inc. All rights reserved.

FILE 'PASCAL' ENTERED AT 21:00:54 ON 10 OCT 2002
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2002 INIST-CNRS. All rights reserved.

FILE 'PROMT' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Gale Group. All rights reserved.

FILE 'RAPRA' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 RAPRA Technology Ltd.

FILE 'RUSSCI' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Andrigal Ltd.

FILE 'SCISEARCH' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 Institute for Scientific Information (ISI) (R)

FILE 'TULSA' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 The University of Tulsa (UTULSA)

FILE 'TULSA2' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 The University of Tulsa (UTULSA)

FILE 'USAN' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 U.S. Pharmacopeial Convention, Inc. (USPC)

FILE 'WELDASEARCH' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (c) 2002 The Welding Institute (TWI)

FILE 'WSCA' ENTERED AT 21:00:54 ON 10 OCT 2002
COPYRIGHT (C) 2002 PAINT RESEARCH

=> s l3
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
  15 FILES SEARCHED...
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
  41 FILES SEARCHED...
SUBSTANCE QUERIES NOT VALID IN THIS FILE
SUBSTANCE QUERIES NOT VALID IN THIS FILE
The logic expression entered contains L#s or saved query names which
correspond to structures built by the STRUCTURE command or to screen

sets. These must be searched in a substance file such as the REGISTRY file. In some files you may use a Registry Number answer set from a structure search as a search term or profile in some bibliographic file containing Registry Numbers, e.g. the CA file. For an explanation, enter "HELP CROSSOVER" at an arrow prompt (=>).

```
=> file biosis
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    75.53     240.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -1.86

FILE 'BIOSIS' ENTERED AT 21:03:19 ON 10 OCT 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 9 October 2002 (20021009/ED)


=> s l3
L11          93 L3

=> s l11 and osteoporosis
         17385 OSTEOPOROSIS
L12          0 L11 AND OSTEOPOROSIS

=> s l11 and arthritis
         71950 ARTHRITIS
L13          0 L11 AND ARTHRITIS

=> s l11 and disc
         27653 DISC
         10387 DISCS
         34736 DISC
                 (DISC OR DISCS)
L14          0 L11 AND DISC
```